



THE
RACES
OF
MANKIND

M. NESTURKH

Professor M. NESTURKH

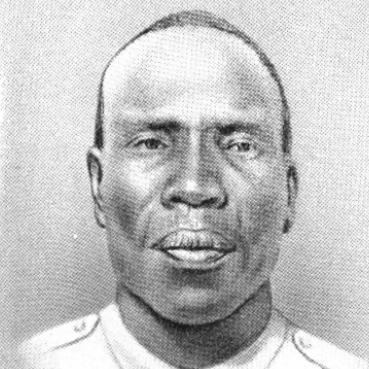
THE RACES
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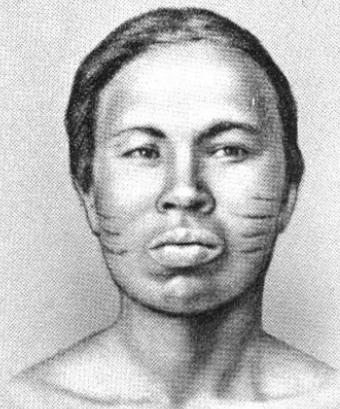
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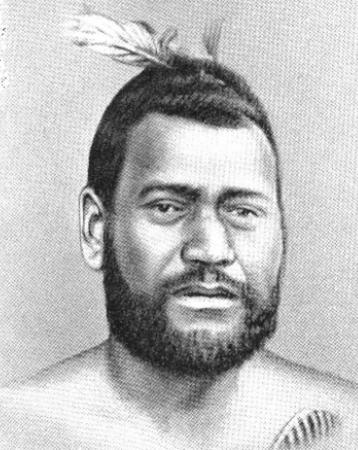
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1 & 2. **Negro man and woman from the Shilok tribe in Sudan (Sudanese group of the African Negroid race).**

3 & 4. **Man and woman from the Andaman Islands (the Andaman or Negritos group of the Australoid race).**

5 & 6. **Maori man and woman from New Zealand (Polynesian contact group of the South Mongoloid race).**

7 & 8. **Man and woman from the Udmurt A.S.S.R. (East European group of the North Europeoid race with an admixture of the Ural-Laponoid contact group).**

9 & 10. **Bashkir man and woman (U.S.S.R.) (East European group of North Europeoid race with an admixture of South Siberian contact group).**

11 & 12. **Norwegian man and woman (Atlanto-Baltic group of the Baltic or North Europeoid race).**

PREFACE

The problem of the races of mankind is one of the most important in anthropology, the science that studies the natural history of man with all the variations due to age, sex, geographical and other factors. The races of mankind are, in actual fact, geographical (or territorial) variations, historically conditioned, of a single physical type—man.

The writings of the founders of Marxism-Leninism contain many valuable statements on such problems as the connection between the origin of the races and the natural geographical conditions of life of primitive man, the distant ancestor of the present-day peoples, the gradual obliteration of racial differences in the course of historical development, the racial mixtures that make up modern nations and the absolute invalidity of racism.

A correct conception of the races of mankind is of particularly great political and scientific importance today, in the period of the collapse of the colonial system and the unparalleled development of the struggle for national liberation by the dependent and colonial peoples. The ideologists of imperialism, in their efforts to provide a basis for class, national and colonial oppression, have advanced the false “theory” of the physical and mental inequality of races, of the existence of “higher” and “lower” races, of races that are capable and those that are incapable of independent social, economic and cultural development.

Racism is closely bound up with reactionary nationalism and chauvinism. The Programme of the Communist Party of the Soviet Union, adopted by the Twenty-Second Party Congress, lays special stress on the fact that nationalist prejudice and the survivals of former national

discord constitute the sphere in which resistance to social progress may be the longest, fiercest, most stubborn, and most implacable.

The misanthropic inventions of the racists stand in direct contradiction to the data provided by anthropology.

The appearance of a popular but scientifically sound book on the races of mankind written by a Soviet anthropologist, therefore, is very opportune. This present book, by Professor M. F. Nesturkh, is based on the methodological principles of Soviet anthropology and the factual data obtained by that science. The author connects the origin of the races with the origin of mankind as a whole and acquaints the reader with the present status of these two problems; he deals at length with the history of the formation, dissemination and mingling of individual anthropological (racial) types and their groups, uses facts to expose the reactionary nature of racism and proves that it has no foundation in science. Professor Nesturkh naturally devotes greater attention to anthropology proper, but he makes extensive use of other natural and social sciences—comparative anatomy, physiology, palaeontology, archaeology, ethnography, psychology, and linguistics—in accordance with Frederick Engels's well-known postulate that anthropology is the transition from the morphology and physiology of man and his races to history.

It must not be thought that Professor Nesturkh's book is limited to an exposure of racism. The problems dealt with are of a much broader cognitive significance. Among other things the reader will find the latest information on the anthropoids of the Tertiary period (the distant ancestors of man and the modern anthropoid apes), the earliest hominids (*Pithecanthropus* and *Sinanthropus*), Neanderthal man and the fossil men of the modern type. The author also deals with the natural selection of the earliest men, geographical isolation, inter-racial crossing, the times and places in which the great races were formed, the ways in which they became disseminated and the relation of tribes, nationalities and nations to the races. He takes the reader on a journey through the animal kingdom to the world of man and introduces him to the beginnings of human history, in the course of which the laws of evolution that apply to the organic world have been replaced by the qualitatively new laws of social development.

In the final chapter Professor Nesturkh, in addition to his exposure of racism, touches on such important scientific problems as "Race and Language", "Race and Mentality". He adduces convincing evidence

of the absence of any causal relation between the racial groups and language groups of mankind; he also shows that all modern races and nations are identical in their mental abilities. Stress is properly laid on the tremendous successes of communist construction in the U.S.S.R. and socialist construction of the People's Democracies of Europe and Asia. The experience of these countries has completely destroyed the reactionary myth that mankind is divided into "higher" and "lower" races and shown that all peoples, irrespective of their racial make-up, are capable of developing genuinely progressive culture and science. The unscientific concept of racism is also refuted by the economic, political and cultural development of the young states in Asia, Africa and Latin America, recently liberated from the yoke of colonialism.

Professor N. N. CHEBOKSAROV
Doctor of History, Miklukho-Maklai Prize winner

INTRODUCTION

The study of races is a branch of science in itself; its purpose is to typify and classify races, show how they developed and give an appraisal of the biological and socio-economic factors in this development. The problems involved are numerous and complicated.

Soviet anthropology proceeds from the concept of races as biological subdivisions of mankind that have taken shape in the course of a lengthy and intricate evolution. In their study of races, specialists rely primarily on such branches of science as anatomy, physiology, embryology and palaeontology, but it is equally important for the anthropologist to avail himself of the data provided by ethnography, archaeology, history and linguistics.

Of great importance for an understanding of the term "race" and its relations to such social groups as "tribe", "nationality" and "nation" are the writings of Marxists on the national question.

This present book is intended mainly to define and analyse the concept of "races of mankind", using predominantly anthropological data.

The majority of Soviet anthropologists divide all mankind into three great races—Mongoloid, Europeoid and Negroid (the terms *yellow*, *white* and *black* races proposed by Georges Cuvier in 1800, although considered obsolete by most scholars, are occasionally still met with). These great races are divided into seven races, each of which contains a number of groups of anthropological types. These groups of types are linked by intermediate or contact groups; modern mankind, therefore, may be regarded as a mixture of numerous anthropological types that make up one biological whole. This explains, to a considerable

extent, why representatives of different races are found in one nation and, vice versa, why one race may enter into the make-up of several nations; the ethnic and anthropological lines of demarcation do not coincide.

Races and racial differences are not something eternal, immutable and inherent in man. In accordance with their general conception of the constant change taking place in the human body under the influence of social, economic and natural factors, Marx and Engels maintained that "even naturally emerging clan differences, such, for instance, as racial, etc., differences... can and must be eliminated by historical development".¹ A particularly great advance in this direction has been made in the Soviet Union where the racial barriers erected under tsarism have been broken down in the process of building socialism.

We regard the second purpose of our book to be that of exposing racism as a reactionary class theory lacking any scientific foundation.

Various "race theories" are very widespread among reactionary scientists in some countries who regard the ruling class of their own nation as the "higher" race and the working people as the "lower" race, or classify nations other than their own as "lower" races and make their own nation the "higher race". In this way they unreasonably confuse the grouping of people by classes and by other socio-economic factors with their biological grouping.

It is precisely by means of race theories that the "white" imperialists justify the enslavement and exploitation of the colonial peoples who, in the majority of cases, belong to the so-called "coloured" Mongoloid and Negroid races. In their writings Soviet anthropologists reflect their respect for the rights of other nations and races that has always been characteristic of the Russian people. The idea of the equality of nations and races was postulated by the great Russian scientist, Mikhail Lomonosov, two hundred years ago.

The principle of the equality of all races was supported by Miklukho-Maklai, a great anthropologist whose scientific studies constituted a brilliant refutation of the theory of "higher" and "lower" races. The revolutionary democrats of Russia were strong champions of the equality of nations; special mention must be made of Alexander Radishchev and Nikolai Chernyshevsky who were interested in anthropological problems and dealt with them in their writings.

Soviet anthropology, employing the achievements of world science in this field, especially the theory of Charles Darwin and his followers,

is constructively developing the materialist concept of races and their genesis; it makes use of the numerous facts that have been obtained by anthropologists at home and abroad in recent times.

The principle of the equality of races was profoundly substantiated and elaborated in the works of Vladimir Lenin; it has found expression in the national policy of the Soviet Union and is recorded in the Soviet Constitution.

The author realises the difficulties attaching to the task he has undertaken and will be satisfied if his readers obtain from this book a general idea of the concept of races and their origin, and a conviction of the unscientific nature of racism.

DEFINITION OF THE RACES OF MANKIND

I. RACIAL CHARACTERISTICS AND THEIR STUDY

The people of different countries differ greatly from each other in the colour of the skin, hair and eyes, the type of hair, the shape of the eyelids, nose, lips, face and head, and in the length of the body and its proportions. These features vary noticeably among people of one country, but a certain combination of them has a fairly stable hereditary character and serves as a basis for classifying those who possess them as belonging to a particular race. We shall deal briefly with a few of the more important racial characteristics but it must be understood that they are of far less importance in life than the differences due to sex and age.

The colour of the skin, hair and the iris of the eyes is due to a brown pigment known as melanin which occurs in the body in crystallised form and in solution. The colour of the eyes and hair is to a considerable extent connected with the pigmentation of the skin.

The intensity of skin colour depends on the quantity and the size of the grain of the pigment. Negroid and Australoid people have more pigment and the grain is larger than that of the other races of mankind so that the blood vessels do not show through the skin (or if they do, only very slightly).

The colour of the skin varies very greatly among different anthropological groups of the same race. Climatic conditions, social factors and the state of health have a strong influence on skin colouring. The degree of pigmentation of the skin may be roughly estimated by using the following descriptive scale: *light*—with pinkish or yellowish tones; *medium*—brown; *dark*—dark-brown or almost black tones.

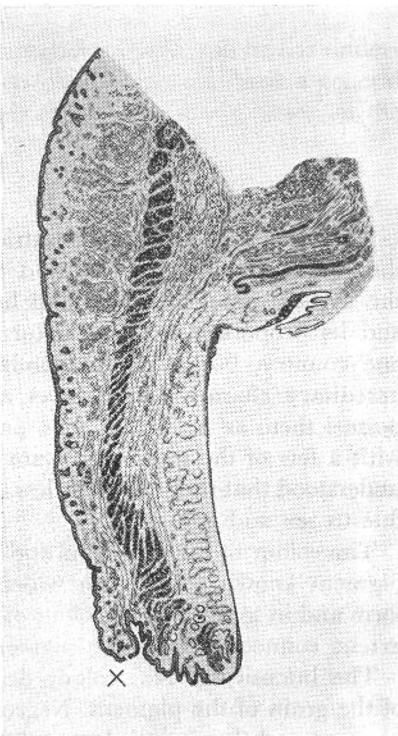
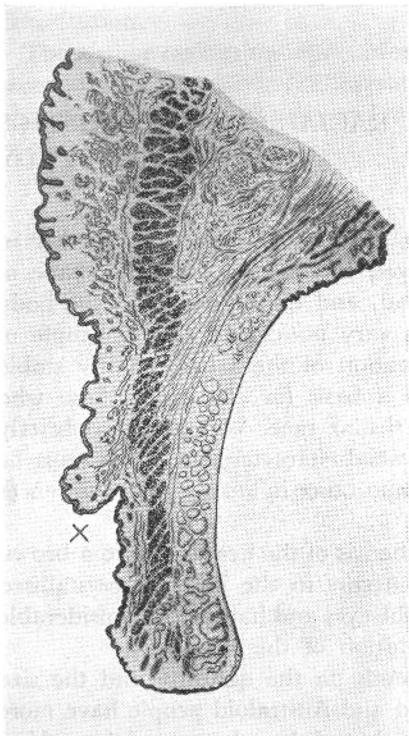


Fig. 1. Development of eyelid fold in Europeoid (upper left) and Mongolian (upper right)

Below: Cross-section of eyelids; x—lower edge of fold

Three types of hair are met with among human beings—straight, undulating and curly. Straight hair may be stiff or soft. There are also differences in the stiffness of other types of hair. The development of body hair in adults varies from considerable density to an almost complete absence.

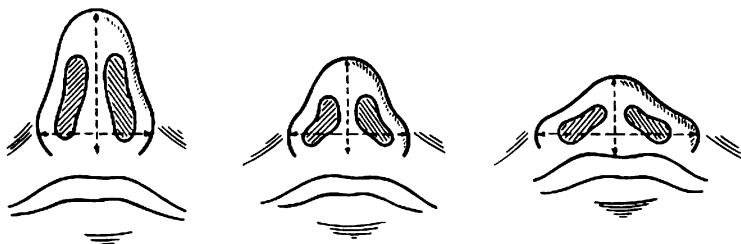


Fig. 2. Variations in the shape of the base of the nose and the direction of the long axes of the nostrils (viewed from below). Arrows show the breadth and height of the nose at the base

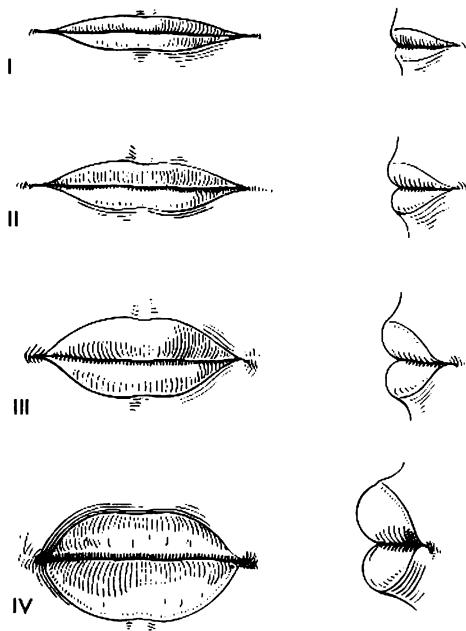


Fig. 3. Variations in the development of lip thickness (frontal and side views)
 I—thin; II—medium; III—thick; IV—very thick

Many features indicating race are to be found in the face. Its shape (seen full-face) is determined mainly by the development of the cheekbones; if they project forward and outward, as is the case with many

Mongoloids, they give a broad, flat face (flat horizontal profile); if the cheekbones are not prominent, as is the case with many Europeoids, they give a narrow face that projects forward (narrowed profile).

When the face is examined from the side (in profile), attention is paid to the extent to which the upper, or nasal, region projects—i.e., the degree of facial prognathism or the vertical profile. Projecting jaws give the profile maxillary prognathism which may be strong, moderate or slight.

The shape of the eyes (Fig. 1) depends on the nature and size of the fold on the upper eyelid, occasionally also on the lower lid, and on the extent to which the eye opens. The shape of the fully open eye, in turn, depends on the way in which the skin is folded and on the thickness of the tissue forming the lids.

The shape of the nose is determined mainly by the height of the bridge, the form of the spine (*dorsum nasi*), the width of the wings (*alae nasi*) and the direction of the long axes of the nostrils (Fig. 2).

The lips are divided into the cutaneous part, the lip proper and the mucous membrane. The most interesting from the point of view of racial characteristics is the red part of the lip proper which anthropologists classify in four groups: thin, medium, thick and very thick (Fig. 3).

If the head is examined from above it is not difficult to see that different people have heads of different shape, ranging from elongated to round. In anthropology use is made of the cephalic (head) index which shows the ratio of breadth to length using the formula $\frac{\text{breadth} \times 100}{\text{length}}$; thus, the longer the head, the smaller the index figure.

The length of the body, or height of the individual, is an important feature; it varies not only with age and sex but also with territorial anthropological groups of people. Among males of different groups it varies from 142 to 181 centimetres, the average for all mankind being about 165 centimetres. Height varies very considerably within any one group.

Special methods and instruments (Figs. 4-8) are used to study racial features; in each case a very large number of individuals is studied. It is desirable, essential even, to ensure the maximum unification of methods.

To determine the colour of the skin, hair and eyes (*see* Plate I), special scales and collections of specimens are used; in the Soviet Union those proposed by anthropologists V. V. Bunak, A. I. Yarkho and

N. A. Sinelnikov are mostly used. The shape of the eyelid, nose and lips is determined with the aid of models prepared by A. I. Yarkho.

In addition to those just described, many other methods of studying racial features are used in ethnic anthropology.

The racial features observed are recorded by photographs and cinema films; casts and drawings of the face, hands and feet are made, and samples of hair and skulls are collected.

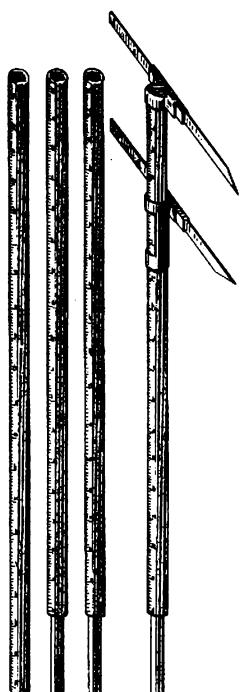


Fig. 4. Anthropometer to measure the length of the body and its parts



Fig. 5. Callipers, used mainly for head and skull measurements

Important data are obtained by an anatomo-anthropological study of the various parts of the body, especially the skeleton and the skull (Fig. 9). The tremendous amount of work that has been done in studying skulls has produced a special branch of anthropology known as craniology.

The data obtained by the description and measurement of large groups of people and of collections of skulls, skeletons and separate parts of the body are subjected to statistical treatment that is often

extremely complicated. The results of this statistical work are recorded in tables, graphs and sculptures.

Using these data, anthropologists then define territorial anthropological types represented by more or less large groups of people

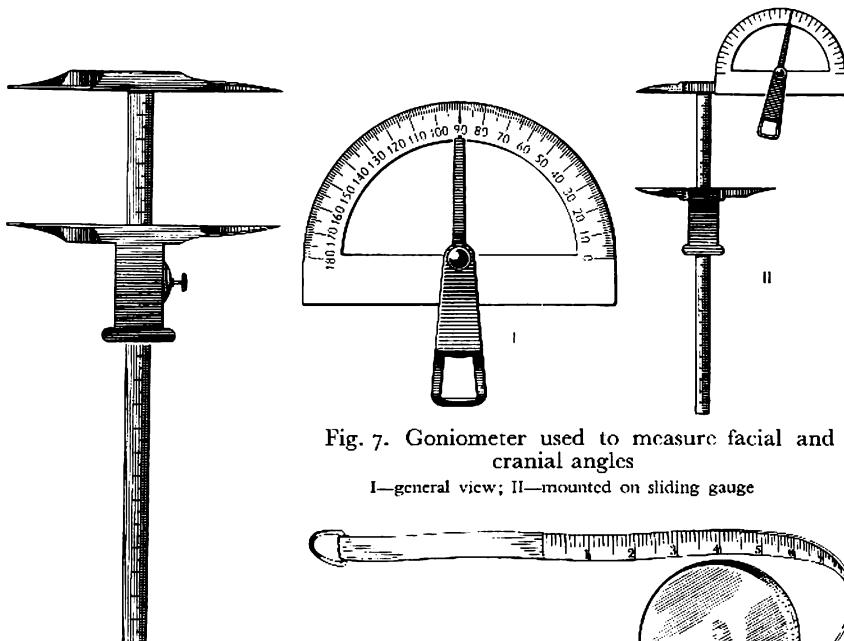


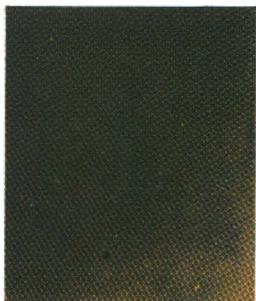
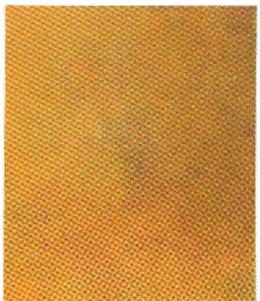
Fig. 6. Sliding gauge used to measure smaller parts of the body and individual organs

Fig. 7. Goniometer used to measure facial and cranial angles
I—general view; II—mounted on sliding gauge

Fig. 8. Metal tape measure with millimetre divisions to measure the circumference of various parts of the body and individual organs

(racial groups) that possess both a complex of sufficiently stable external features (the shape and proportions of the body) and an internal structure that have developed historically in various parts of the inhabited world.

Racial analysis frequently leads to a better understanding of the way a certain nation developed. Usually a nation is composed of a number of anthropological types, and not of one only, so that the



Main variations in the colour and form of hair, colour of iris and skin, shape of eyes:

stiff (upper left), curly (upper right), wavy hair, varying in colour; light, mixed and dark eyes (the last shows the epicanthus typical of Mongoloids and Bushmen); light, intermediate and dark skin pigments

ethnogenetic data provided by anthropology constitute an important source of history.

We shall omit the numerous classifications that have been used in the past and deal only with the most modern subdivisions of races that are based on such important factors as habitat, the origin of the different groups of mankind and the degree of philogenetic relation between them.

One of the modern methods of classification is based on territorial groups of anthropological types that are distinguished by complexes

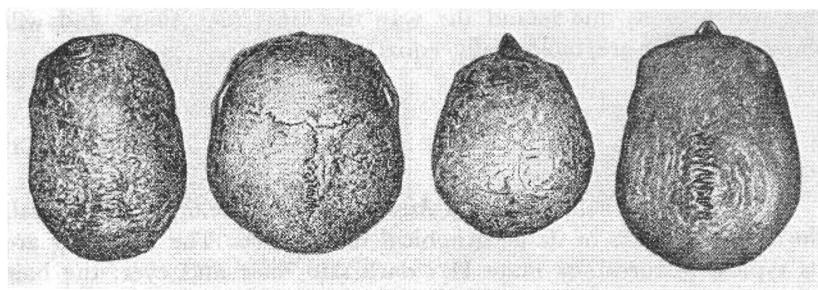


Fig. 9. Variations in the shape of the skull

Left to right: dolichocephalic (ellipsoid); two brachycephalic (round or sphenoid); mesocephalic (pentagonoid)

of racial features typical of the group. (The expression "racial group" is a loose term which may refer to any group of individuals or types; it is not always applied systematically in our classification.) Groups of anthropological types form seven races which in turn are united into the three "great races"—(1) Negroid or Afro-Asian, (2) Europeoid or Eurasian and (3) Mongoloid or Asio-American. This is basically Professor Cheboksarov's system of classification.²

Y. Y. Roginsky also adopts the classification of three great races but subdivides them into twenty-two races which, in general, coincide with Cheboksarov's groups of anthropological types.³

V. V. Bunak proposes a classification⁴ which differs sharply from that of the above two anthropologists. He is of the opinion that fossil man of the modern type differentiated into four racial stems as early as the Mesolithic or Neolithic period. The first of these is the "tropical stem" which includes the African Negroes, Negrillo Pygmies, and Bushmen on the one hand, and the Melanesians, Papuans, Negrito

Pygmies, and the extinct Tasmanians on the other. The second is the "southern stem" to which belong the Veddahs, Ainu, Polynesians, Malayans and Australian aborigines. The third, "western stem" consists of sixteen racial types of a Europeoid character, including Ethiopians. The fourth is the "eastern stem" which also contains sixteen types, all Mongoloid; it includes the Urals and American Indian groups.

Bunak's classification contains forty-eight types distributed according to twelve "branches" or sub-races.

Now let us examine the specific features of the great races of mankind; this will help us understand the way the races took shape and will show that they are biologically equal.

2. THE NEGROID GREAT RACE

This race is also called Negroid-Australoid, Afro-Asian, or Equatorial, the last by reason of its geographical distribution. The following are its typical features (*see* Plate II): dark skin, hair and eyes; the hair of the head is in tight spirals or is wavy; as a rule the hair on the face and body is scanty although some groups have considerable body hair; the cheekbones are narrow; the nose is not strongly developed and in most cases is wide at the base; the long axes of the nostrils are almost transverse; the upper jaw projects somewhat, making the face slightly prognathous; the lips are thick, the upper lip projecting (*procheilous*); the mouth is rather wide; in many representatives of this race the lower limbs are long with reference to the trunk.

The race takes its name from the dark pigmentation of the skin, hair and eyes (Latin: *niger* = black).

Although the Negroid Equatorial race is widely distributed, it numbers today only about 300 million representatives, which is approximately ten per cent of the human race. The chief habitat of the Negroid race is Africa, the central and southern part of which is called Black Africa; representatives of this part of the Negroid great race call themselves Africans.

The Africans constitute the western branch of the Negroid great race; most of this branch are Negroes (Figs. 10, 11 & 12). The most typical features of the race are to be observed in the Negroes of the Sudan—dark-brown (or chocolate-brown) skin; stiff, tightly-coiled hair

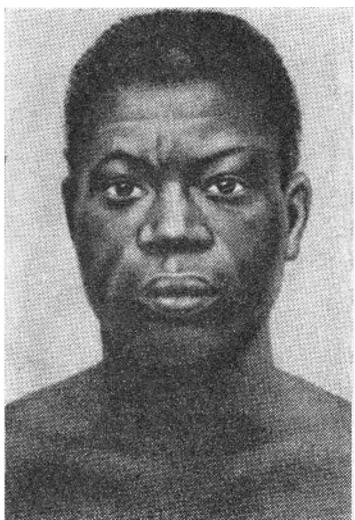


Fig. 10. Negro
(Sudanese group of Negroid race)

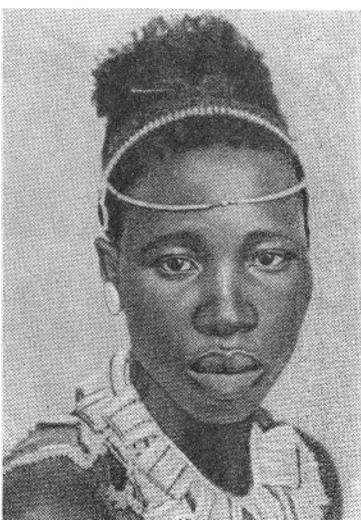


Fig. 11. Negro woman
(Sudanese group of Negroid race)



Fig. 12. Negro woman from Dahomey
(Sudanese group of Negroid race)



on the head (the hair emerges from the skin at an acute angle to the surface, is bent subcutaneously and is oval in cross-section (Fig. 13).

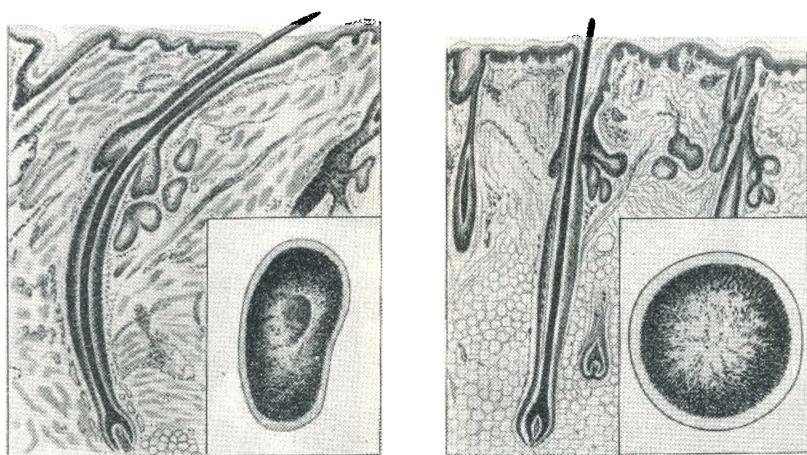


Fig. 13. Cross-section of the scalp

Left: with curly hair; right: with straight hair. Insets—cross-sections of the same hair

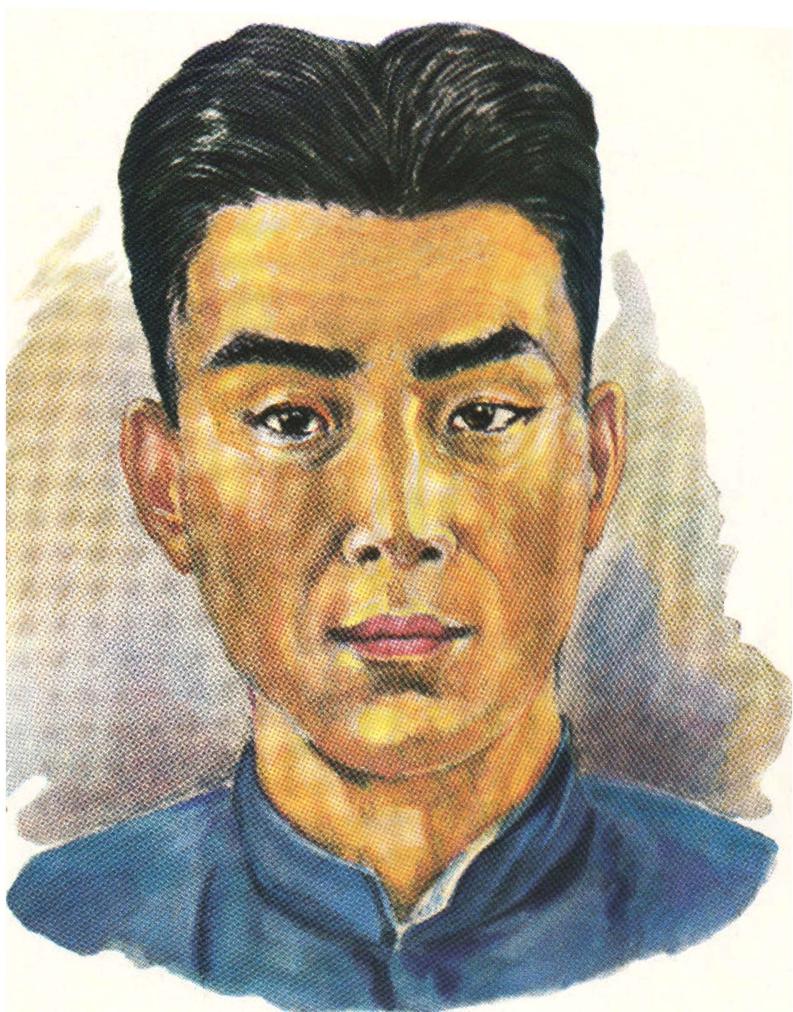
Facial hair (moustache, beard) and body hair (in the armpits and pubic region) is poorly developed.

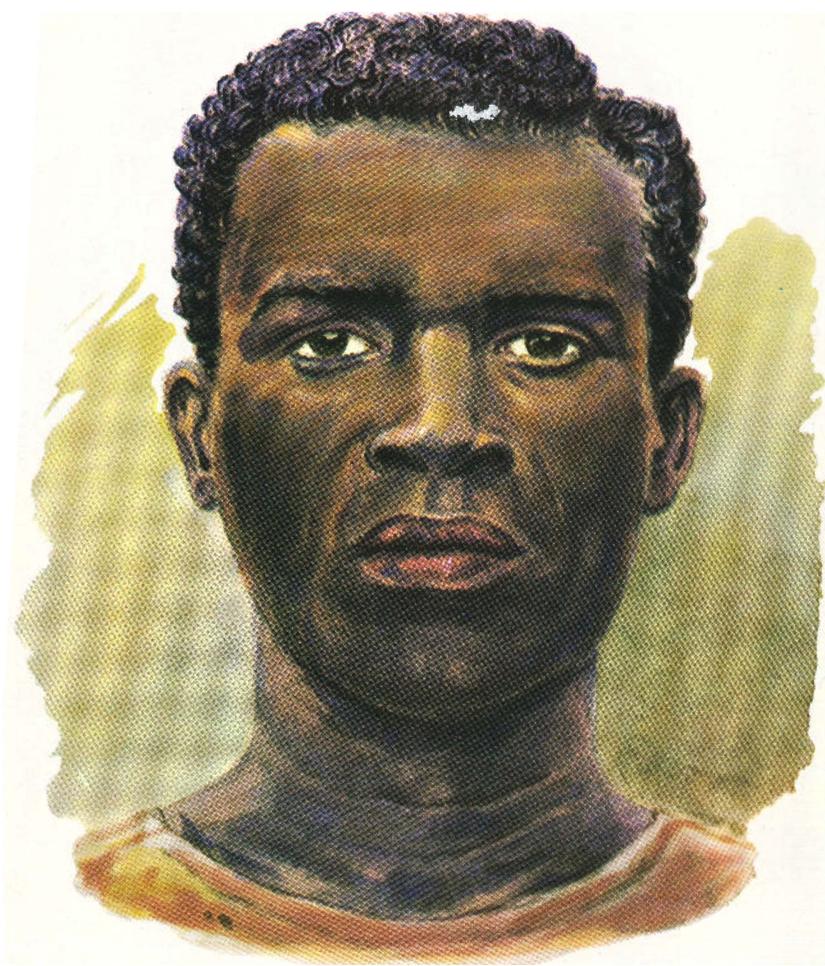
Among African Negroids the face is relatively small and slightly flattened. The forehead is high and straight, sometimes bulging, with a faintly-developed supra-orbital or brow ridge. The eyes are big and dark-brown in colour. The bridge of the nose is low and the wings are very wide; the nose is often flattened with the height only half the width at the base; in such cases the long axes of the nostrils are in a transverse direction. The lips are thick and sometimes give the impression of being puffed. The lower part of the face is often prognathous. The chin is moderately developed. The head (viewed from above) is usually long, or dolichocephalous in shape*. The height varies considerably, but many representatives of the Negroid race are tall. The lower limbs are long in comparison with the trunk.

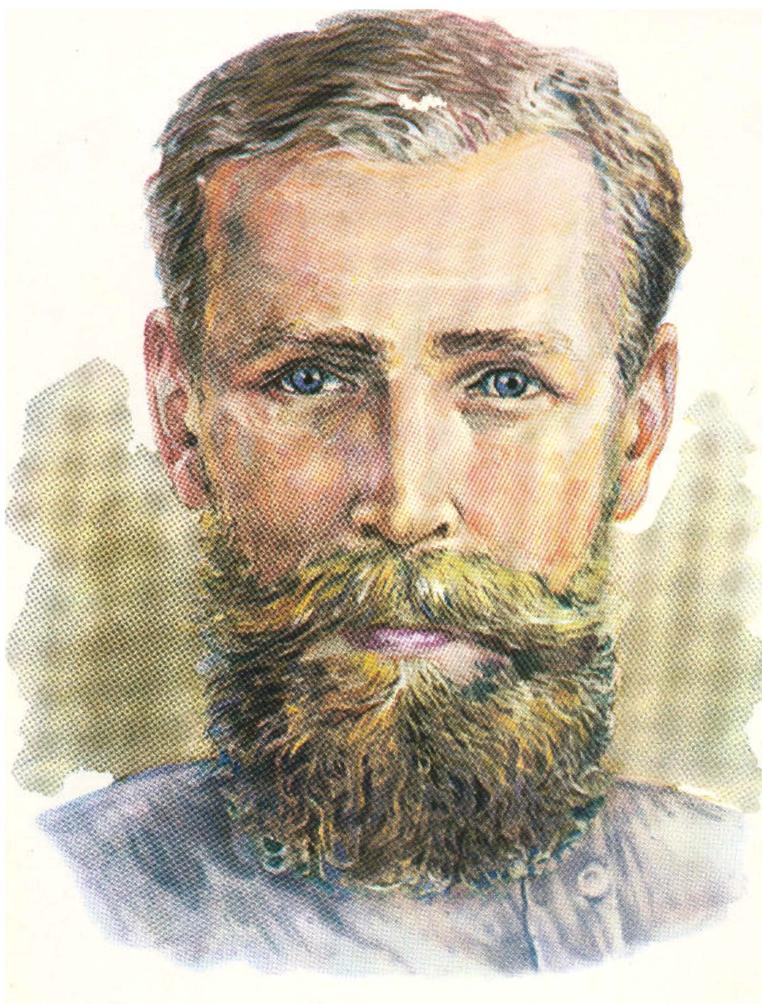
* Heads are classified according to the index, the ratio of breadth to length expressed as a percentage, i.e.,
$$\frac{\text{breadth} \times 100}{\text{length}}$$
. Heads with an index up to 75.9 are dolichocephalous; from 76.0 to 80.9—mesocephalous; 81.0 and higher are brachycephalous.

In the study of skulls the cranial index is used, the figures being somewhat lower than those of the head index. Mesocranial skulls range from 75.0 to 79.9, those with a lower index are dolichocranial and those over 80.0 are brachycranial.

Plate II.







Negroid (*left*), Europeoid (*centre*), Mongoloid (*right*)

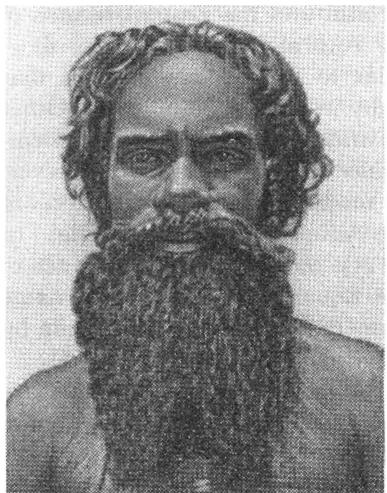


Fig. 14. Australian of the Arunta tribe
(Australian group of Australoid race)

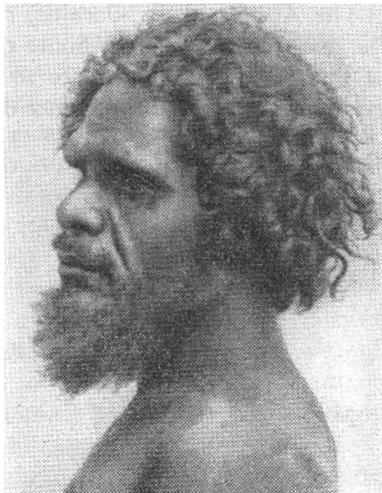


Fig. 15. Australian of the Vorkit tribe
(Australian group of Australoid race)

Many different anthropological types are found within the Negroid race whose features distinguish them from the Sudanese Negroes. Some have lighter skin, others have a narrow straight nose, a third group has lips of medium thickness, while a fourth is short in stature with legs of medium length in comparison with the trunk.* The Nilotc Negroes have an average height of 180 cm and are among the tallest people in the world.

The Negroid race proper includes, in addition to the Sudanese group of anthropological types, the South African (Bushmen), Central African (Pygmy) and East African (Ethiopian) groups.

* Body proportions differ greatly among people of the same height; the proportion is taken as the ratio of the length of the body (trunk, neck and head) to that of the legs.

An individual with a short body and long legs is dolichomorphous, with legs of medium length he is mesomorphous, and one with a long body and short legs is brachymorphous.

Dolichomorphy and brachymorphy are typical of certain groups of anthropological types and are met with among all the three great races. Some groups of the Negroid great race show a prevalence of dolichomorphous types (Negroes, Ethiopians, Australians), others are mesomorphous (Papuans) and a third group is brachymorphous (Melanesians, Pygmies). Dolichomorphy is usually connected with great height; most people are mesomorphous.

The Australoid, or Oceanic, race constitutes the Eastern branch of the Negroid great race. Some of the Australoids, for example, those of the Solomon Islands, are so similar to the African Negroes that even anthropologists experience difficulty in distinguishing them. Other

Australoids who bear some resemblance to Negroes cannot, however, be mistaken; such, for instance, are the Australian aborigines (Figs. 14 & 15). Since the Eastern branch of the Equatorial race takes its name from the latter we shall begin by describing them.

At the present time there are about 50,000 Australian aborigines although at the time the colonisation of Australia began there were about 300,000.

There are a number of local variations in the Australian race, but in general the people are fairly similar and typical. This is explained by their development for some tens of thousands of years in almost complete isolation on a relatively small continent. Anthropologists have

been studying the Australian aborigines for several decades but not all groups have yet been thoroughly examined.

The following features are typical of the majority of Australian aborigines: dark- or chocolate-brown skin; wavy black hair; well-developed tertiary body hair, strongly developed on the face (beard and moustache); the face is narrow and low; the forehead is somewhat sloping with strongly developed supra-orbital (brow) ridges; eyes—dark hazel; the nose is big with a low or medium bridge* and very wide nostrils; the lips are thick; the jaw projects considerably (noticeable

* When the root of the nose is sunken, the bridge is low. In individuals with strongly developed nasal bones the bridge is high and in profile the line of the forehead forms an almost straight line with the nose, the bridge being only slightly indented. The nose line may be concave, straight or convex in its bony and cartilaginous parts or in one of them.



Fig. 16. Tasmanian
(Melanesian group of Australoid race)

prognathism); the chin is poorly developed; the head is dolichocephalous (long); the height is above average, and many representatives are tall.

The Australian aborigines are not an isolated racial group. New Guinea and other Melanesian islands are inhabited by the Melanesian and Papuan groups of anthropological types who are related to the Australians. The Tasmanians, who became extinct in the nineteenth century, also belonged to the Melanesian group of types (Fig. 16).

Some reactionary scholars place the Australian aborigines very low down in the scale of types, regarding them as something like Neanderthalers. This opinion is ridiculous since the Australian aborigines are as much people of the modern type as the representatives of other races; their peculiar features, such as the sloping forehead, heavy supra-orbital ridges and weakly-developed chin are met with in other groups.

The Australians intermarry easily with individuals from other races, including Europeoids, and their children are perfectly normal. There are several hundred people living on the Australian continent who are of triple origin—Tasmanian-Australian-Europeoid. There are altogether about 40,000 people in Australia of mixed origin.

3. THE EUROPEOID GREAT RACE

The Europeoid or Eurasian great race (*see* Plate II), is very numerous and accounts for about forty per cent of all mankind, i.e., about 1,200 million people. With the discovery of America and later of Australia, the Europeoids spread all over the world. The nucleus of the race, however, is in the Old World—Europe, Asia and North Africa. In India alone there are something like 400,000,000 Indians and other Europeoids (Fig. 17).

The following features are typical of Europeoids. The colour of the skin varies from light to dark, even brown, with reddish or pinkish tones on the face; the hair on the head is soft and wavy (or straight) and varying in colour from light to dark*; the tertiary hair of the

* The colour of the hair depends on the quantitative relation of melanin in grain to melanin in solution. The greatest amount of the pigment in solution is found in reddish hair. In general, the greater the amount of grain pigment, the darker the hair. Dark hair is black or dark brown; medium—the various shades of chestnut; light—the various blond shades; albinos with white hair containing no pigment are occasionally met with; some individuals have no pigment in either the skin or the eyes.

body shows strong or medium development, and that of the face is often highly developed; the forehead is straight or slightly sloping.

The middle region of the face (from the nasion or root of the nose to the stomion, a point between the lips) projects rather strongly, but the cheekbones and jaws are not prominent; in general the face

is orthognathous (i.e., without developed prognathism, or projecting parts); the corners of the eyes are at one level and the fold of the eyelid is weakly developed; in the majority of cases the eyes are brown, but there are also many individuals with grey, light blue and dark blue eyes,* mostly among the peoples of the northern half of Europe; the nose is narrow with a fairly high bridge; the long axes of the nostrils are placed in an almost straight line from back to front (this is called the sagittal position of the nostrils); the lips are thin or medium and do not project (they are orthocheilous); the chin is medium or strongly developed; the shape of the head varies very greatly, all three types being very widespread.

Fig. 17. Toda man from Southern India
(Indo-Pamir group of South Europcoid race)

The Europcoid great race is divided into two races—the South Europeoid or Indo-Mediterranean (Fig. 18), and the North Europeoid or Atlanto-Baltic (Fig. 19). The first race has skin, hair and eyes of a darker and the second of a lighter colour. The two races are joined by transitional, or contact groups of anthropological types for which dark hair, brachycephaly and medium height are typical; in Roginsky's classification (1956) they constitute the Middle-European race.

* The colour of the eyes, or rather of the iris, depends not only on the quantity of crystal melanin but also on the way in which it is deposited. If it lies deep in the iris the eyes seem light or dark blue, especially when there is no melanin in the vascular layer and the deposit is visible at considerable depth. Eyes are classified according to the colour of the iris as dark, mixed and light.



Fig. 18. Tajik
(Indo-Pamir group of South Europeoid race)



Fig. 19. Norwegian
(Atlanto-Baltic group of North Europeoid race)

Among representatives of the Indo-Mediterranean sub-race are Indians, Tajiks, Armenians, Greeks, Arabs, Italians and Spaniards. Their typical features are: black, wavy hair, brown eyes, a convex nose line, a very narrow face and head either dolichocephalous or mesocephalous.

Among Russians, Byelorussians, Poles, Norwegians, Germans, English and other European peoples living more to the north, we meet with a different complex of features: very light skin, fair or light-brown hair, grey or blue eyes and a relatively long nose. These northern Europeans are mostly tall; they make up the Atlanto-Baltic race.

4. THE MONGOLOID GREAT RACE

The Mongoloid, or Asio-American great race (*see* Plate II) includes about a half of mankind, i.e., some 1,500 million people. Of these, 700,000,000, or almost a half, are Chinese. The greater part of the Mongoloid race is found in Asia, especially in its northern, central, eastern and south-eastern areas. The Mongoloid race has also spread across Oceania and the American continent.

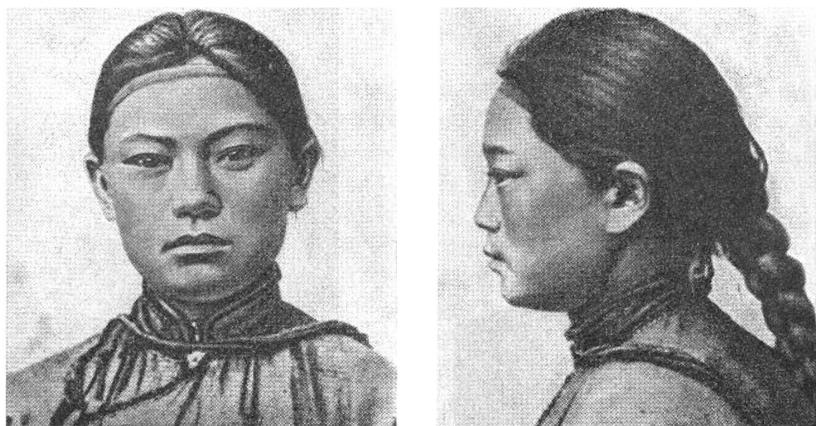


Fig. 20. Mongolian woman
(Central Asian group of North Mongoloid race)

Many Mongoloid groups are found in the Asian part of the U.S.S.R.—Yakuts, Buryats, Tungus (Evenki), Chukchi, Tuvinians, Altaians, Gilyaks (Nivha), Aleuts, Asiatic Eskimos and many others. In the European part of the U.S.S.R. Mongoloid anthropological types enter into the composition of the Bashkirs, Tatars, Chuvash and several other peoples.

The following are the chief features of the Mongoloid great race: skin, light or darkish, with yellow or yellowish-brown tones; the hair of the head in almost all cases is straight and stiff, usually black in colour; the beard and moustache as a rule develop late and are scanty; tertiary body hair is almost absent.

Among the specific features of many anthropological types of this race, especially the Northern Mongoloids, are the following: a broad face that projects moderately (mesognathism), the broad, projecting cheekbones giving it a flat appearance; the eyes are brown, the eye slit is medium in the majority but narrow in many cases; in some individuals the external angle of the eye is disposed higher than the internal angle; there is a well-developed fold on the upper eyelid that in many cases extends to the cilia and crosses the lower lid, completely or partially covering the internal angle of the eye, including the lacrimal bay, to form the epicanthus; the nose is of medium width,



Fig. 21. South American Indians—Patagonians
(Patagonian group of American Mongoloid race)

slightly projecting and usually with a low bridge (the nose of the American Indians projects strongly and has a high bridge; that of the Eskimos has a very low bridge); in the majority of cases the nostrils are in the medium position with their long axes at an angle of about 90° to each other; the lips are thin or medium, the upper being procheilous; the chin ridge has medium development; in very many individuals the head is mesocephalous.

The Mongoloid great race is divided into three races. The first is the North Mongoloid or Asian Continental; the second is the South Mongoloid or Asio-Pacific and the third is the American.

As representatives of the North Mongoloid, or Asian Continental, race we may name the Buryats and Mongols (Fig. 20). These are fairly typical Mongoloids, although the Mongoloid features are not very sharply defined—the skin, hair and eyes are lighter in colour and the hair is not always stiff, but the beard is very scanty, the lips are thin and the face is broad and flat.

In South-East Asia the South Mongoloid race predominates, the majority of the representatives of this race—Malays, Javanese, Sunda—have a darker skin, a narrower and lower face, medium or thick lips and a wide nose; the epicanthus is less common than among the Northern Mongoloids; the beard develops, but not strongly, the hair on the head is sometimes wavy; they are shorter in stature than the Northern Mongoloids and much shorter than the Chinese.

The third Mongoloid race—the American Indian—is of an intermediate character since the Mongoloid features are not very strongly expressed and there are some peculiarities that approximate this race to Europeoid types. The American Indians (Fig. 21) usually have straight stiff hair, black in colour; the beard, moustache and tertiary body hair are scanty; the skin is yellowish-brown, the eyes—dark brown; a great many individuals have broad faces. It is these features that make the American Indians typical Mongoloids. However, the fold on the eyelid (although well-developed it does not as a rule form an epicanthus), the strongly projecting nose with a medium or high bridge, and also the general type of the face makes them resemble Europeoids. Some of the tribes have wavy hair on the head, others have beards.

We may now give Professor N. N. Cheboksarov's (1951) classification of the races of mankind in the form of a table.

Great Race	Race	Group of Anthropological Types
Negroid (Equatorial)	Negroid (African)	South African (Bushman) Central African (Pygmy) Sudanese (Negro) East African (Ethiopian)
	Australoid (Oceanic)	Andaman (Negritos) Melanesian Australian (aborigine) Kuril (Ainu) Ceylon-Zond (Veddah)

Great Race	Race	Group of Anthropological Types
Europeoid (Eurasian)	South European (Indo-Mediterranean)	South Indian (Dravidian) C. Anterior Asian Mediterranean-Balkan Atlanta-Black Sea, C. East European C.
	North European (Atlanto-Baltic)	Atlanto-Baltic White Sea-Baltic
Mongoloid (Asio-American)	North Mongoloid (Asian Continental)	Urals C. South Siberian C. Central Asian Siberian (Baikal) Arctic Far Eastern (East Asian)
	South Mongoloid (Asio-Pacific)	South Asian Polynesian C.
	American (American Indian)	North American Central American Patagonian

(C—contact or transitional group)

5. FEATURES COMMON TO ALL RACES

To sum up, we may draw the conclusion that despite the noticeable differences in groups of anthropological types separated from each other by considerable distances, the races are nevertheless closely connected, even in their outward appearance.

The races of mankind may be regarded as more or less big biological groups of individuals that are relatively similar from the morphological point of view. The races are of common origin and cannot be regarded as different stages of development. Each of them is characterised by a definite but hereditarily changing complex of morphological and physiological features. The races took shape under the joint influence of natural and socio-economic conditions of life. It follows from this

that the races of mankind, although they, in general, more or less correspond to the subspecies of animals, must be distinguished from them qualitatively.

The specific features of the races of mankind are less due to adaptation to nature than are those of the analogical intraspecies subdivisions of animals. It is probable that earlier races, especially the most ancient of them, owned much more to adaptation. The influence of the environment, however, did not affect them to the extent it affected man's animal ancestors. This is because the fundamental role in the development of man is played by social, and not by biological factors, so that natural selection has gradually lost its significance (*see* pp. 61, 62).

The races of man, furthermore, easily intermarry. In this respect they are substantially different from subspecies groups of wild animals in the development of which crossing does not have great significance. If we represent man's development in the form of a tree, many branches—not only the neighbouring but also distant branches—will be directed towards each other and will intertwine.

Hereditary changes in man are conditioned primarily by social factors. This also distinguishes the races of man very sharply from analogical groups of higher animals.

It is, therefore, probable that the emergence and development of the races of extinct and modern man followed a line of development different from that of subspecies of wild (or domestic) animals. Since the origin of the races is closely connected with anthropogenesis, the next chapter will be devoted to the origin and development of man.

RACES AND THE ORIGIN OF MAN

1. FOSSIL MEN OF THE MODERN TYPE

Soviet anthropology accepts the theory that modern man developed from a Neanderthal ancestor. The Neanderthalers in their turn developed from the earliest men who had their origin in one of the species of highly-developed fossil apes. This theory is known as the theory of monogenesis.

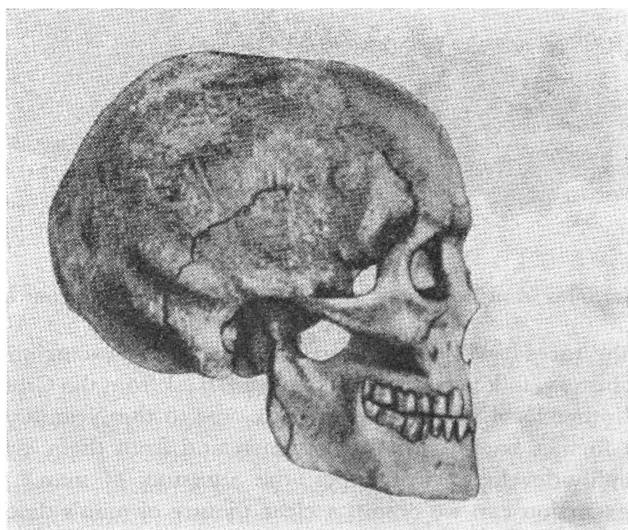


Fig. 22. Skull from Grotte des Enfants, Menton, France

Some scholars are of the opinion that man descended from several species of apes and that each of them developed, through a local variety of the earliest man and later of Neanderthal man, to form one of the

modern great races. This is the theory of polygenesis. The supporters of the polygenetic theory maintain that the races of modern man are not phylogenetically connected with each other, that they are not related. Polygenesis, however, has no basis in science.

The problem of the origin of races, therefore, is bound up with the wider problem of the origin and development of man.⁵ To find the

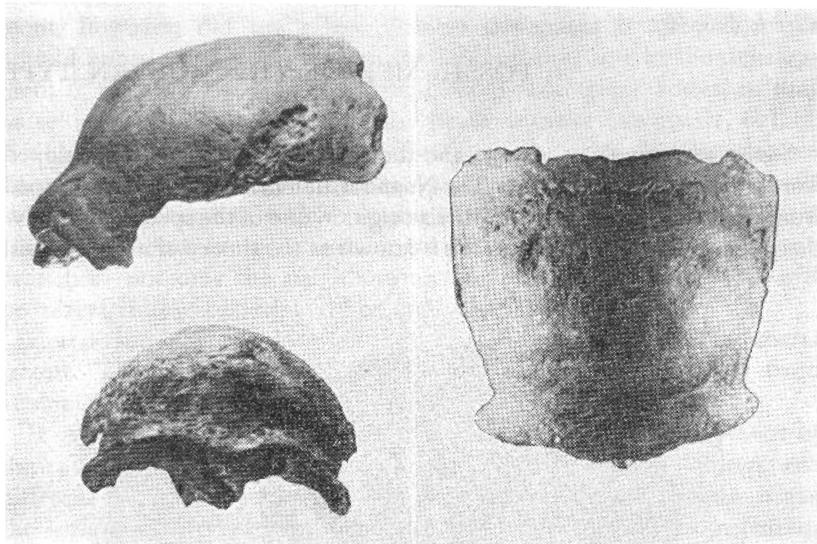


Fig. 23. Cranium from Podkumok (U.S.S.R.) seen from side, front and above

roots of the races it will be necessary to make a brief excursion into the depths of history, following the path that leads back from the Cro-Magnon man and other fossil men of the modern type to the Neanderthal men and then further back to the earliest men and from them even as far as the highly-developed fossil apes, the ancestors of man.⁶ Only by such an excursion can we obtain a clear picture of man's descent from some species of anthropoid ape, discover the conditions under which the races were formed and establish in what ways the process of racial development differs from that by which the subspecies of animals took shape.

Tens of thousands of years ago (at the time of the Upper Palaeolithic) there were people living on earth whose structure was, in general,

the same as that of our contemporaries. The remnants of the bones of those people were discovered in a grotto near the village of Cro-Magnon (France) in 1868. Since then similar remains have been found in other places in Western Europe (Fig. 22) and also in Africa, Asia and Australia. Early Neolithic skeletons, resembling those of Cro-Magnon, have been discovered in the Crimea—in the Murzak-Koba⁷ caves in 1936 and Fatma-Koba⁸ caves in 1927. In 1952 several skeletons were unearthed during excavations at the village of Kostyonki, 45 kilometres south of the town of Voronezh (U.S.S.R.).⁹ In 1955 the skeleton of an eighteen-month-old child was found under an overhanging cliff at Staroselye, near Bakhchisarai in the Crimea. People of this type, whose remains have been found in Europe have been given the name of Cro-Magnon men.

It is the opinion of competent scholars that the Cro-Magnon folk and a number of other fossil men of the modern type descended from the Neanderthalers. This theory is supported by the discovery of a number of skulls with transitional features (Fig. 23) and also by numerous instances of typical Neanderthal features being discovered in the skulls of people living today.¹⁰

Judging by the structure of the skull and the skeleton as a whole, three chief races were taking shape among people of the Late Palaeolithic, and these form the basis from which the great races of modern man developed.

2. NEANDERTHAL MAN—THE ANCESTOR OF MODERN MAN

The Neanderthal folk (Figs. 24 & 25) were the ancestors of the Cro-Magnon men and their contemporaries, and were at the same time the descendants of the earliest men. These primitive people are known from numerous remains of their bones and tools found in the Old World, some of them in the U.S.S.R., in the grottos of Kiik-Koba in the Crimea¹¹ and Teshik-Tash in Uzbekistan¹² (Fig. 26), for instance. The Neanderthal men lived over a long period, from 50,000 to 300,000 or even 400,000 years ago.

These ancient men got their name from the Neander Thal, a valley in Germany where, in 1856, the remains of a human skeleton were found that in structure differs very greatly from that of modern man. Darwin mentioned the Neanderthal cranial vault in his writings.

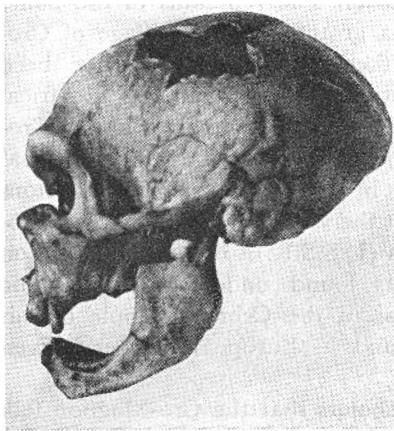


Fig. 24. Neanderthal skull from La Chapelle-aux-Saints, France (1908)

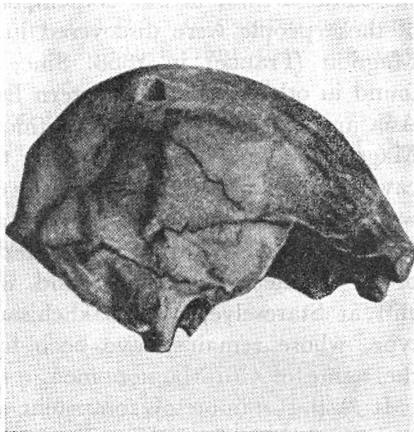


Fig. 25. Neanderthal skull from Ngandong, Java (1931)

The Neanderthal skull is outstanding among the skeletal remains on account of its huge size; its specific features are: an elongated cranium, a heavy ridge over the eyes (supra-orbital ridge), a sloping forehead and a low cranial vault. The occipital bone of the skull seems to be

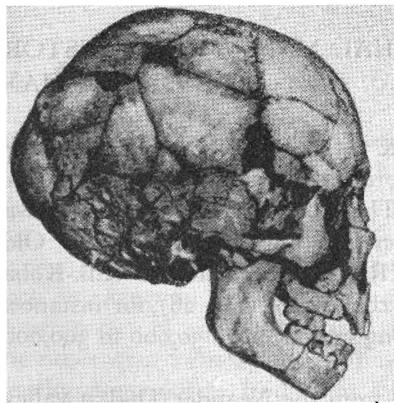
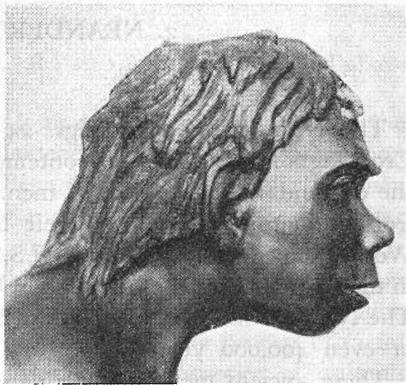


Fig. 26. Skull and bust of Neanderthal boy from Teshik-Tash Grotto, South Uzbekistan (U.S.S.R.), 1938
(Restoration and reconstruction by M. M. Gerasimov)



shaped by pressure from above; the heavy ridge on it serves as a means of attachment for the neck muscles. A most striking feature is the powerful development of the upper jaw and nose bones. The massive lower jaw of the Neanderthal man is almost completely devoid of a chin ridge; the teeth frequently have a larger dental cavity than those of modern man.

The Neanderthal people were not so tall as modern man. Their skeleton is much more massive and has a more pronounced external relief, evidence of powerful muscles. The spinal column is only slightly curved, which, together with the shape of the cervical vertebrae, gives it some resemblance to that of the anthropoid apes. The thigh is noticeably curved and the calf is short in comparison with the thigh; this shows that the Neanderthal men were probably not very agile in their movements (Fig. 27).

The average volume of the cranium of Neanderthal man was almost the same as that of modern man—about 1,400 c.c. The brain, however, especially the frontal regions, was less developed and less intricate than the modern human brain.

The Neanderthalers, or primitive men, spread over large parts



Fig. 27. Neanderthal
(Reconstruction by N. A. Singel'nikov and
M. F. Nesturkh, drawn by S. G. Obolensky)

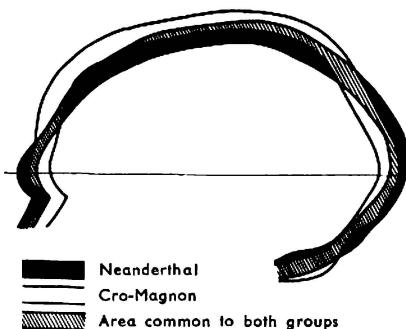


Fig. 28. Shape of the cranium of
fossil men shown schematically

of the Old World—Europe, Africa and Asia. Over this extensive habitat they occurred in a considerable number of different physical types. Several races of Neanderthalers are known to science. Some of them possessed a bigger brain which brings them closer to the type of modern man; others had crania of smaller volume but were closer to modern man in other respects (Fig. 28). Soviet anthropologists do not accept the opinion that the modern races of mankind descended directly from the Neanderthal groups.¹³ The Neanderthal structural type, however, undoubtedly developed into the modern type and from the latter the races developed.

3. EARLIEST MAN—THE ANCESTOR OF THE NEANDERTHALER

The ancestors of the Neanderthalers were the more ancient men of the Old World. Among the precursors of the Neanderthal men were the Heidelberg man, *Atlanthropus*, *Telanthropus*, *Sinanthropus*, *Pithecanthropus*. Some of them are more closely approximated to the Neanderthal type, others to the apes.

The earliest men are physically a transitional type between the ape and man. These fossil representatives of mankind still bear a strong resemblance to apes. They have strongly sloping foreheads and a massive supra-orbital ridge, the skull is very low and there is no chin. The size of the brain of these “intermediate creatures” is far removed from that of the anthropoid apes; the brain varies in volume from 900 to 1,200 c.c., while that of the biggest ape, the gorilla, is from 450 to 750 c.c.

The earliest men not only used natural objects as tools—sticks, stones, etc.—they had already begun to make artificial tools and some of them knew the use of fire. We may, therefore, regard these creatures as the earliest human beings.¹⁴

These early men with their numerous ape-like features appeared at the very beginning of the Quaternary period, about a million years ago. This particular stage of development lasted an extremely long time, about half a million years, right up to the ice age in the middle of the Quaternary period.

The earliest of the primitive men was the *Pithecanthropus* (Java) and somewhat later the *Sinanthropus* (China) appeared. Very close to them is the Heidelberg man (Germany) the lower jaw of whom

was found in a sand quarry near the village of Mauer at the very considerable depth of 24.1 metres.

Judging by the massive jaw and the absence of the chin, the Heidelberg fossil man of that distant period (300,000-400,000 years ago) closely resembled an anthropoid ape. That jaw, however, carries well-expressed human features: (1) teeth close together, with no spaces between them; (2) the pattern of the cusps and grooves on the grinding surface of the molars; (3) small crowns of the canine teeth that do not project beyond the other teeth; (4) the horseshoe shape of the mandible.

Unfortunately no other bones of the Heidelberg man have been found. We know nothing of his stone implements probably of the Chellean type, that is, very crude and primitive. Similar implements have been found in many countries of Europe and Asia side by side with animal bones (such as the mammoth, the Etruscan rhinoceros, the primitive horse) similar to those found in the Mauer sandstone quarry.

About 2,000 kilometres separate Mauer from Ternifin, or Palicao (15 km from Mascara in Algeria) where in 1954 and 1955 three lower jaws (two of them incomplete) and a fragment of the parietal bone of very ancient men were discovered. The district in which the finds were made is in the vicinity of the Atlas mountains from which the very primitive people once living there have been named—Atlanthropus.

V. P. Yakimov¹⁵ is of the opinion that the Atlanthropus jaw, although similar to that of the Heidelberg man, is also noticeably different from it. It is closer to the jaws of the Sinanthropus and Pithecanthropus, a group to which the bone remains from Ternifin must also belong. The primitive nature of the Atlanthropus skeletal remains is in complete conformity with the crudeness of the stone implements (Chellean in type) which date the remains as belonging to the beginning of the next—the Acheulean—epoch.

In 1949 another discovery of a very ancient man was made at the opposite end of Africa. In a cave at Swartkranz, 25 km south-east of Johannesburg, J. Robinson discovered an incomplete lower jaw in Lower Pleistocene deposits. The jaw is smaller than that of the Heidelberg man, but is similarly massive and possesses other structural similarities. This applies also to the fragment of a second jawbone found in the same cave in 1950.

Robinson called the Swartkranz man the Cape Telanthropus, because it was found in Cape Province and represents a fully human being

(Greek: *teleos*—perfect, complete), and not an ape, as other scholars believed.

Telanthropus, Atlanthropus and the Heidelberg man all belong to the earliest stage of human development.

The first Sinanthropus skull (Fig. 29) was discovered in 1929 in a cave at Choukoutien, 54 km south-west of Peking by the Chinese anthropologist Pei Wen-chung.

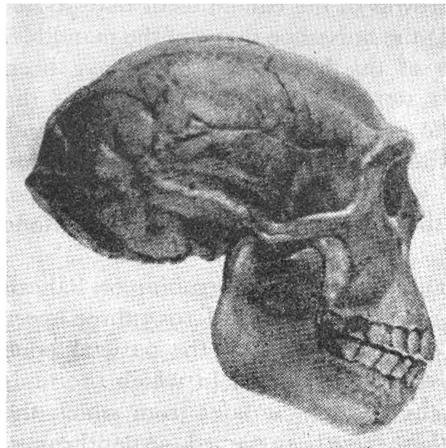


Fig. 29. Sinanthropus skull
(Reconstruction by M. M. Gerasimov)

was farther removed from its anthropoid ancestors than the Pithecanthropus.

The Sinanthropus skull possessed some Neanderthal features such as a slight bulge in the parietal region and a supra-orbital ridge of the same shape. The skull, however, is widest in the lower region while that of the Neanderthal man is widest in the middle region; in modern man it is widest at the top owing to the powerful development of the parietal lobes and the existence of the parietal bulge.

The frontal lobes of the Sinanthropus brain were relatively of poor development; they tapered anteriorly and inferiorly in the "beak" shape typical of the anthropoid apes.

A cranial cast made from the interior of the skull shows clearly the internal bone relief that to some extent corresponds to the convex parts of the brain; there are long grooves that contained the blood

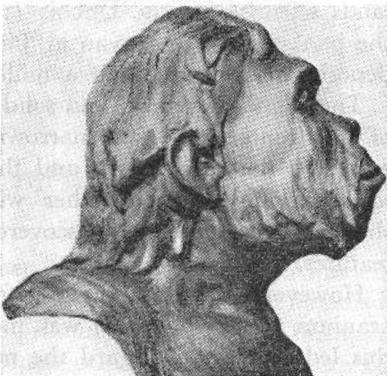
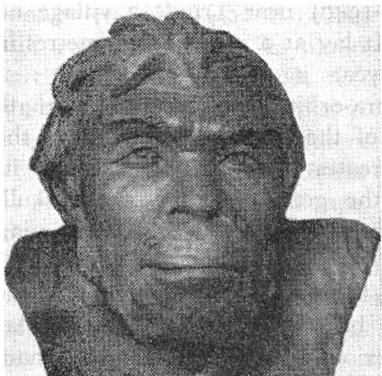
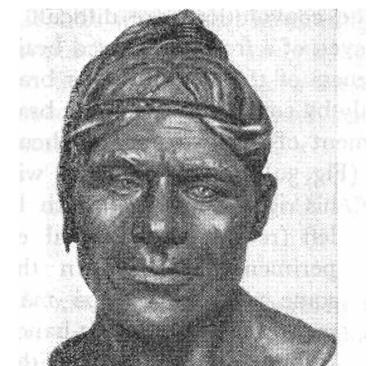


Fig. 30. Fossil men

Upper row: Cro-Magnon; middle row: Neanderthal; bottom row: Sinanthropus
(Reconstruction by M. M. Gerasimov)

vessels of the cerebral cortex. Since the convolutions are difficult to distinguish under the thick membrane even of a freshly-removed brain, only a rough estimate of the primitiveness of the *Sinanthropus* brain can be made from the cast, and then only by comparison with the brain of modern man. The uneven development of the two cerebral hemispheres shows that the *Sinanthropus* (Fig. 30) was more agile with

his right hand than with his left (recent physiological experiments have shown that some varieties of ape make greater use of the right hand).

The discovery of the *Pithecanthropus*, the existence of which had been predicted by Darwin's theory, marked an epoch in the development of the science of evolution. Although the discovery was made more than seventy years ago, it still possesses the liveliest scientific interest.

The *Pithecanthropus* cranial vault (Fig. 31) was discovered in 1891 by the Netherlands scientist Eugène Dubois (1858-1940) near Trinil, a village on the banks of the Bengawan in Java. It lay at a depth of 15 metres in deposits formed over half a million years ago.

The sloping forehead and solid supra-orbital ridge, the great length of the frontal bone, the narrowing of the skull backward from the eyes, the flattened crown and the greatest width of the skull in its lower region, taken together with the general shape of the skull, showed that the newly-discovered creature possessed many simian features.

However, the brain, judged from the considerable volume of the cranium (about 900 c.c.) was much bigger than that of the gorilla; this led scholars to regard the mysterious being as a primitive man. This opinion was strengthened by the find (by Dubois) of a thigh-bone (at the same depth and about 15 metres from the skull) in 1892; in shape and structure it differs little from that of modern man.

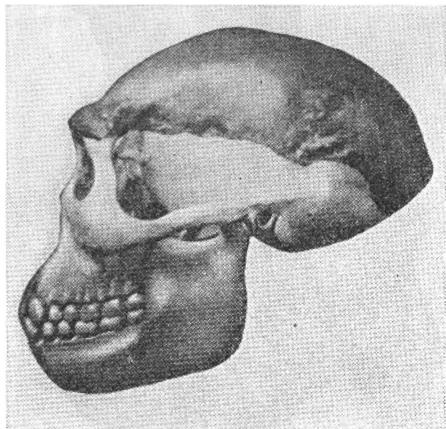


Fig. 31. *Pithecanthropus* skull I
(Found by E. Dubois, 1891, reconstruction)

Dubois was correct in naming the creature he had found "Pithecanthropus erectus" or upright ape-man. Dubois regarded the creature as a transitional type between ape and man. Later finds of bone fragments from four skulls and from five thigh bones confirmed Dubois' postulate.

4. THE ANTHROPOIDS—THE ANCESTORS OF THE EARLIEST MAN

Scholars are of the opinion that the ancestors of the earliest men were big anthropoid apes that possessed a brain of considerable volume. They lived on the ground in tropical (or subtropical) grasslands. They walked on two legs in a more or less upright position.

This opinion was expressed by Jean Lamarck (1744-1829) and theoretically substantiated by Darwin; in our day it has been splendidly confirmed by the discovery of a fossil ape—the Australopithecus.

In 1924, on the south-eastern verge of the Kalahari Desert in South Africa, the very ancient skull of a 3-5 year-old anthropoid ape (Fig. 32) was found near the Taung railway station. The skull was described by Raymond Dart¹⁶ and opinions on it differed; some scholars regarded it as a young chimpanzee, others as a baby gorilla and still others as an extinct species of ape related to those African apes.

Dart, however, pointed out a number of features that approximated the skull to that of early man. Among these features were the forehead that sloped less and a facial region less prominent than that of the ape; the closely-placed teeth, poorly-developed canines and the nature of the cusps and grooves on the crowns of the molars are also similar to the human tooth pattern. On the basis of these peculiarities Dart considered the Australopithecus the direct ancestor of man.

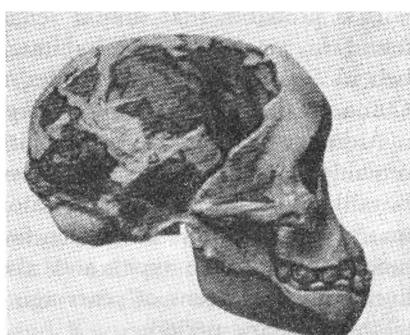


Fig. 32. Skull of a young Australopithecus (Africa)

Another skull was later found at Sterkfontein not far from the location of the original find, apparently that of an adult *Australopithecus*; this skull possesses a set of even teeth in a horseshoe-shaped jaw. At Krugersdorp, near Pretoria, a second skull of an adult ape, related to the *Australopithecus* was unearthed and described. In the same area a number of other interesting finds of teeth, jaw-bones, skulls and other bone remains of more than a hundred individuals have been made, all of which belonged to similar apes.¹⁷

The South African finds show that ground-living, biped anthropoid apes with brains of 500-600 c.c. in volume existed not only during the half-million years of the present Quaternary period, but also towards the end of the Tertiary period. They fed on plants, roots, bulbs and grains, and also hunted various small and medium-sized animals, using meat as food to a considerable extent. It is possible that some of the apes made use of sticks and stones that came their way.

It is probable that similar remains of ground-living bipeds will be found in man's original habitat, which, in our opinion, is a wide belt in South Asia that includes the regions of Malaya and Indo-China, and perhaps extends to part of north-east Africa.

Although the Asian *Australopithecus* has not yet been found, the remains of fossil apes were discovered some eighty years ago in the Siwalik Hills, three hundred kilometres north of Delhi. Since then many teeth and jaws have been found in that area belonging to lower monkeys (macaque type) and also to apes or higher monkeys that lived tens of millions of years ago in the Miocene or Pliocene epochs of the Tertiary period.

The greatest interest attaches to the bone remains of the anthropoid apes, especially the *Dryopithecus* and *Ramapithecus*, animals as big as a chimpanzee. One of the *Dryopithecus*, judging by the size of its teeth (almost twice the size of those of man) must have been almost as big as a gorilla.

The *Ramapithecus* is the closest to the human genealogical tree of all the Siwalik apes. Judging by fragments found in 1934 and 1935 by G. E. Lewis, the teeth of the *Ramapithecus* were set in a parabolic jawbone similar to that of man; in this it differs from the usual ape jaw in which the incisors and the two rows, left and right, of the molars, are disposed in the form of a letter U, the two rows being almost

parallel, and forming near right angles with the front teeth, the canines being set in the angles.

The *Ramapithecus* lived at the beginning of the Pliocene epoch, from ten to twelve million years ago, and may be considered one of the links in the chain of man's descent. If that species had not become completely extinct it could have developed into a South Asian *Australopithecus* and, further, into a *Pithecanthropus*.

At the present time scientists are extremely interested in finds of the remains of fossil apes, the *Gigantopithecus* and *Meganthropus*, made in South-East Asia.

The *Gigantopithecus* fully justifies its name—the size of its body, judging by the size of the lower molars (they are 22 millimetres long) was greater than that of the gorilla, or at least very close to it. The first three molars of the *Gigantopithecus* were selected by the palaeontologist G.H.R. von Koenigswald from 1,500 teeth of fossil orangutans that he had bought in chemists' shops in Hong-Kong (the ground teeth and bones of fossil animals are used in China in the preparation of certain medicines). Some points of resemblance between these teeth and those of man led another scholar, Franz Weidenreich, to put forward the hypothesis (1943) that the *Gigantopithecus* was the ancestor of the Java Man or *Pithecanthropus*. Weidenreich named the *Meganthropus* as the intermediate link; a fragment of the jaw of this ape with three teeth attached was found at Sangiran on Java in 1941.¹⁸

Since then three incomplete lower jaws of the *Gigantopithecus* (apparently two males and one female) and about a thousand teeth have been unearthed. All the remains of these animals came from caves in the provinces of Yunnan and Kwangsi. Together with them were found the remains of animals, whose meat was apparently used by the *Gigantopithecus* in addition to vegetable food.

Weidenreich's hypothesis that early man developed as a result of the diminution of gigantic ancestors did not meet with sympathy among scientists. Judging by the fragment of the lower jaw and three teeth found in Java in 1941, the *Meganthropus* bears some resemblance to the *Pithecanthropus*.¹⁹ The *Gigantopithecus*, however, is undoubtedly outside man's line of descent.

Now let us take man's genealogy farther back and make a more detailed study of the ancestor common to man, the chimpanzee and the gorilla—the animal known to science as the *Dryopithecus*.

As far back as 1856 the remnants of the lower jaw of a fairly big anthropoid ape, the *Dryopithecus* (Fig. 33) were found at Saint-Gaudens (France). Darwin, who knew of the find, considered that apes of that type may have been the common ancestors of man and the African anthropoids, the gorilla and the chimpanzee. This opinion gained ground when about a dozen pieces of lower jaws and many separate *Dryopithecus* teeth were studied.

During recent decades the remains of anthropoid apes similar to the *Dryopithecus* have been found in Miocene and Pliocene strata of the Tertiary period in Europe, South Asia and North Africa.²⁰

The phylogenetic relationship of the *Dryopithecus* and man is established by the structure of the jaws and teeth of the fossil ape and fossil man. It is confirmed by

the relative sizes of the cusps on the grinding surface of the lower molars of the *Dryopithecus* and the disposition of grooves between the cusps; this pattern has the shape of a letter Y and is to be found even among people living today. The two rows of molars, however, are almost parallel in the *Dryopithecus* jaw, the canine teeth

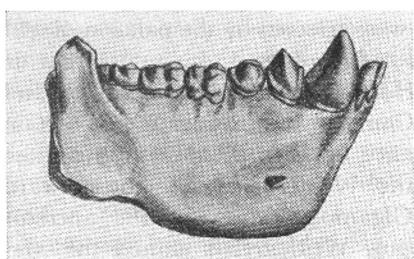


Fig. 33. Lower jaw of *Dryopithecus fontani*

are longer than the others and when the teeth are occluded the upper canines fit into the spaces (diastems) between the lower canines and the premolars; the lower canines fit into diastems between the canines and incisors of the upper row of teeth.

This development of the canine teeth is typical of the anthropoid apes and of other monkeys. From this evolutionary stage man has inherited the long roots of his canine teeth that today are out of all proportion to the small crowns.

Almost two dozen species of anthropoid ape living in the second half of the Tertiary period are known to science. In the U.S.S.R. the remains of a fossil anthropoid were found in 1939 at Udabno (Georgia) by Y. G. Gabashvili and N. O. Burchak-Abramovich; this new species of fossil ape was given the name of *Udabnopithecus*.²¹

Considerable interest attaches to the latest finds of traces of fossil apes, the *Oreopithecus* and *Zinjanthropus*. The first of these has been

known to science since 1872 from isolated teeth discovered near Mount Bamboli in Tuscany, Italy. The rare find of an almost complete skeleton was made on August 2, 1958 in a lignite mine near the village of Baccinello (Tuscany) at a depth of 200 metres. Judging by the wide pelvis the *Oreopithecus* probably walked on two legs. The Swiss palaeontologist, Johann Hürzeler, regards the *Oreopithecus* as an anthropoid ape, one of man's ancestors living in the early Pliocene epoch.

Still greater interest was aroused by the find (July 17, 1959) of the incomplete skull of a hitherto unknown anthropoid in East Africa. The discovery was made by Mary Leakey and her husband Louis Leakey, prominent British scholars who were conducting palaeontological excavations in the mountains of Tanganyika. The skull fragments lay at a depth of several metres and with them were some extremely crude stone tools. The Leakeys were of the opinion that the implements were made by the anthropoid to whom they gave the name *Zinjanthropus* from the word *Zinj*, the ancient Arab name of East Africa. This opinion, however, is disputed by Soviet scholars (V. P. Yakimov, 1960).²²

There were doubtlessly many more such apes living on earth at the end of the Tertiary period, although only one species of highly-developed biped ape was able to become man's ancestor. This is the theory of monogenesis held by Charles Darwin and supported by many modern scholars.

Before Darwin's books appeared the unity of mankind was treated metaphysically, as the development of man from a single pair. The modern theory of monogenesis regards man as having descended from one species of anthropoid.²³

Supporters of the contrary theory of polygenesis overestimate the stability of the complex of the hereditary features of the great races and consider that the races developed independently of each other from different species of apes. These scholars have gone so far as to maintain that the Negroid-Australoid race and the gorilla had a common ancestor, and that the Mongoloid race and the orangutan and the Europeoid race and the chimpanzee are similarly related. Polygenesis does not hold water when confronted with such facts as the amazing anatomical and physiological similarity of all races of mankind. This similarity is true even of the minutest details and cannot possibly be explained by convergence in the course of development from different ancestors.

5. THE RACIAL PECULIARITIES OF MAN AND THE ANTHROPOID TYPE OF STRUCTURE

The better to show how groundless is the theory of "higher" and "lower" races, we shall begin by comparing some of the more important specific structural features of the modern races of man with that of the chimpanzee, the species that, together with the gorilla, is man's nearest relative in the animal kingdom. Of the several known

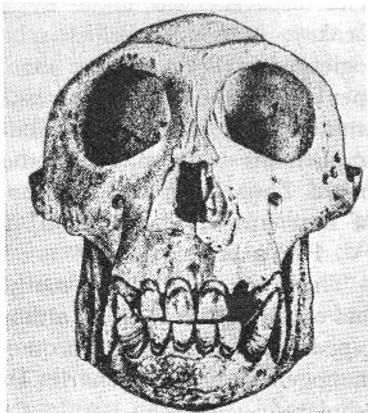
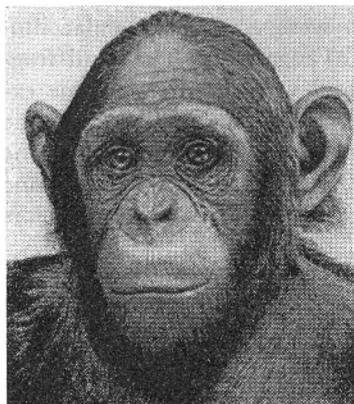


Fig. 34. Face and skull of chimpanzee

types of chimpanzee, that bearing the greatest structural resemblance to man is the dwarf bonobo ape, an inhabitant of the forests to the south of the Congo main stream, first discovered in 1929.

Many scholars are of the opinion that the chimpanzee has a face (Fig. 34) that is probably very similar to that of the *Dryopithecus*, the fossil anthropoid of the Miocene epoch that Darwin considered to be one of man's immediate ancestors.

The chimpanzee's forehead slopes considerably, while that of man is more or less straight. The skin on the forehead of representatives of all races is devoid of hair and the eyebrows are very distinct. Modern man has no continuous ridge over the eyes and the bridge of the nose such as the chimpanzee has. This supra-orbital ridge is typical of Neanderthal man and approximates him to the apes.

The nose of the chimpanzee is very small, narrow and has a low bridge; the nasal skeleton is soft, with little cartilage. Man, on the contrary, has a well-developed nose and its cartilaginous skeleton consists of many parts (about a dozen). The most important of them is the firm cartilage that forms the nasal septum. The cartilages of the nose, together with the nasal bones, cheekbones and others give shape to the human nose and its wings.

The chimpanzee's lips have no red edge, a feature possessed by man alone. In Mongoloids and Europeoids the red part of the lips is, as a rule, of medium or poor development but in Negroids it is very highly developed which gives the lips their puffy appearance. We do not know to what extent the red skin on the lips was developed among the Neanderthalers, but we may be certain that among the earliest men it was, at best, extremely thin.

The cutaneous part of the lips is well developed in all the races of man and in the chimpanzee. The lips of man have an intricate musculature, allowing the great variety of expression typical of people of all races. The powerful development of the skin of the lips in both man and the chimpanzee accounts for the amazing similarity of facial expression in representatives of the most varied races and the chimpanzee. We must mention here that the chimpanzee does not possess the vertical groove on the upper lip that is common to all races of mankind.

The chin region of all modern men projects forward and does not slope backward as is the case with the chimpanzee and with the fairly recent ancestor of modern man, the Neanderthal. Great variations in the development of the chin are to be found; some Negroids and Australoids have a poorly developed chin while others have average development like the chin of the Mongoloids and Europeoids.

None of these racial or group variations exceeds certain bounds so that no race can be considered closer to or farther from the chimpanzee.

The hair on the chin, cheeks and upper lip that develops mostly among Europeoids and Australoids, is somewhat similar to the facial hair of some of the anthropoid apes, for example, the orangutan or gorilla. Mongoloids and Negroids have very little hair on the face. No human being has on his face those sensory bristles known as vibrissae; the anthropoid apes have two or three pairs of them and they correspond to the "whiskers" of other mammals.

Now let us look at the chimpanzee's skull; it is the most convenient

to compare with the human skull because the facial region is not considerably greater than the cranium as is the case with the bigger and more specialised gorilla and orangutan. The external relief of the chimpanzee skull with its ridges, swellings and roughness is not so developed as in other great anthropoids; this is evidence of relatively little specialisation. The transverse occipital ridge is weakly defined and the longitudinal sagittal ridge along the suture of the parietal bones, a feature that is so typical of the male gorilla or orangutan, is completely absent in the chimpanzee. It has, however, a powerful supra-orbital ridge similar to that of the gorilla; this ridge is continuous over the orbits of both eyes and the bridge of the nose.

The supra-orbital ridge was powerfully developed in the more ancient fossil hominids, the Pithecanthropus and the Neanderthal man. The ridge is vestigial on the skull of modern man in the brow arches and on the lateral bones of the forehead.

The brow arches and bone formations connected with them are sometimes given the name of "supra-orbital process" by specialists. This bone growth is developed to varying degrees among the different races. Among the Negroid races the variations are very considerable—ranging from the powerful supra-orbital growth of the Australoids, through strong or medium among the Melanesians to weak or medium among the other Negroids. The growth is medium or small among the Polynesian group of anthropological types, also small or medium among the Dravidians and very small among the Veddahs and Malays. Among the Mongoloids it is usually small or medium, but powerful growths also occur.

The variations among Europeoids are still greater ranging from very small among the Italians to powerful among the Armenians and certain North Europeans.

This brief review shows that none of the great races can be classed as primitive because of the development of supra-orbital arches. Since the supra-orbital growth is very weakly expressed among the majority of Negroid types, the racists are unable to use the data on its development to prove their assertion that the Negroid race is a lower category than the Europeoid. In general, the heavy supra-orbital arches that are met with among people living today, even when accompanied by a sloping forehead, differ radically from the supra-orbital ridge of the Neanderthalers and do not indicate primitiveness.

The structure of the skull has often been used by racists as a means of determining the degree of organisation of a race. This part of the

human body has been studied in great detail by anthropologists so that it is not difficult to refute the unfounded assertions of the racists.

Many of the typical features of man's skull are due to the complicated structure of the brain in its parietal, occipital and frontal regions. The frontal bone of the skull is of especial interest from the point of view of evolution. Early man had a sharply sloping forehead, that of modern man is more or less vertical.

It would seem, therefore, that the angle at which the forehead slopes should serve to show how highly organised a race is. It has been shown, however, that the average angle of the forehead among Australian aborigines is 60.4° and that of the Eskimos 59.5° , so that in this respect Australoids and Mongoloids are at the same level. A similarly small angle is also found among Europeoids—the Alsatians, for instance, have an angle of 60° .

The size of the angle varies very greatly. Representatives of the Europeoid great race are in this respect in no way superior to the Mongoloids and Australoids, to say nothing of the Negroids whose foreheads do not slope and in many cases even protrude. To this we must add that the different types of forehead of modern man cover frontal lobes of the brain that are equally well developed; these are the lobes that are closely connected with speech and with the highest forms of nervous activity.

The anterior surface of the upper jawbone of the chimpanzee is flat. It is similar to that of the Neanderthal man in having no canine depressions such as those clearly defined on the shortened maxillary region of the skulls of many modern people, although they are not so clearly defined in representatives of the Mongoloid great race.

The lower jaw of the chimpanzee has no chin protuberance found (in a primitive form) only on the skulls of some of the later forms of primitive man—the Palestine Neanderthalers from Mount Carmel, near Haifa, for example. As we have mentioned, the existence of the chin projection is one of the most typical features of modern man. The weakly-developed chin of the Australian aborigines is due more to the protruding jaws than to the structure of the chin region.

The teeth of the chimpanzee are closer in structure to the human type than those of any other anthropoid. The chimpanzee, like all Old World monkeys, has thirty-two teeth—two incisors, one canine, two premolars and three molars on each side of the upper and lower

jaw. The chimpanzee's canine teeth are much higher than the others, and on occlusion they enter the corresponding diastems in the opposite teeth; this is true of all monkeys. The fossil anthropoids—the African *Australopithecus* and the Indian *Ramapithecus*—had more regular rows of teeth from which the canines projected but slightly.

The representatives of all the races of mankind have thirty-two closely-placed teeth; the canine teeth do not project above the others and there are no diastems. The end molars ("wisdom teeth") of modern man are, as a rule, less developed than the others, and one or two of them may not appear at all; sometimes all four wisdom teeth remain undeveloped in their sockets. The wisdom teeth of some Negroid-Australoid groups develop fully; this is due to the greater length of the jaw.

The teeth and jaws of man have grown much weaker than those of his predecessors, but his cranium has undergone exceptional development. This feature is connected specifically with man's unusually large brain, the organ that distinguishes him, more than any other, from the anthropoids.

The brain of the chimpanzee has features that very obviously relate it to that of man, as any scientist who studies the primates is fully aware.

Modern man, however, has a brain that is several times larger than that of the chimpanzee; the average human brain varies from 1,200 to 1,600 c.c., that of the chimpanzee from 350 to 500 c.c. The biggest brains of all are found among the Buryats. If the "white" race is a higher race than either the "yellow" or the "black" race, why is it that the biggest brain is not found among representatives of the Europeoid great race, but among the Buryats, who belong to the Mongoloid great race?

The gyri (convolutions) and sulci (furrows) of the chimpanzee brain form a definite pattern, basically similar to that of man's more highly developed brain. The central lobe of the cerebral hemisphere of the chimpanzee brain is not completely immersed in the fissure of Sylvius; this is explained by the poor development of the surrounding areas of the frontal, parietal and temporal cortex which in man cover the central lobe completely (this lobe is also known as Reil's island). The ape fissure between the temporal and occipital lobes is well developed in the chimpanzee. According to S. M. Blinkov's data (1955),²⁴ it corresponds to the lunate sulcus in man.

On the medial (interior) aspect of the occipital lobe of the chimpanzee brain is the calcarine (spur-shaped) sulcus of fissure, that all apes have in common with human beings of all races; the sight area of the cerebral cortex is situated around this sulcus.

The cortex of the human brain with its numerous convolutions and furrows is a much more complicated structure than that of the chimpanzee or even of the Neanderthal man, although the brain of the latter is very big.

The work done by Soviet scientists at the Moscow Institute of the Brain and the Laboratory of the Evolution of the Brain at the Institute of Anthropology, Moscow University, for example, shows that differences in the shape of the convolutions and furrows and in the delicate internal structure of the cortex among people of different races are, contrary to the assertions of the racists, almost imperceptible and of little significance.²⁵ An individual may be defined as belonging to a certain race by the shape of his skull, but not even specialists, anthropologists and anatomists, can define the race of a man by his brain.

Vladimir Betz, the famous Russian anatomist (1834-1894) who was the first to make a cyto-architectonic study of the cerebral cortex, stated in a lecture delivered at the Society of St. Petersburg Physicians in 1870, that his investigations had shown that the arrangement of convolutions of the brain of African Negroes was in principle the same as that of the brain of a European.

Approximately the same applies to the pattern of the flexor grooves and papillary ridges on the palmar surface of the hand and the soles of the feet, the shape of the outer ear, the distribution and growth direction of hair on the head, trunk and limbs. These are features that could not be due to convergence.

If we examine the races existing today from the point of view of the hereditary simian features of their body structure, we find that no race displays these features to such a more considerable extent than the others that it may be considered more primitive.

The nose of the African, for example, has very wide wings, but the canine depressions on the upper jaw are well defined, the lips are thick, the hair of the head is in tight spirals, there is practically no body hair and the legs are long relative to the trunk. The shape of the African's nose may be "closer" to that of the chimpanzee, but in other features he is "farther" from that animal than the Europeans with their narrow straight noses, for their canine depressions are shallower, their

lips thin and the hair of the head wavy; they have considerable quantities of hair on the face and body and their legs are shorter.

In connection with this it is worth while recalling the conclusion drawn by the German anthropologist A. Weissbach from data collected during a voyage round the world in the frigate *Novara* in the sixties of the last century. The resemblance between man and the apes, he wrote, is not concentrated in any one nation; all peoples are, to a greater or lesser degree, the possessors of evidence of this hereditary relationship; Europeans cannot claim to be an exception to this relationship with the apes. In other words, Europeans have a physical structure that is no "higher" than that of other peoples.

6. THE MAIN FEATURES OF THE STRUCTURE OF THE HUMAN BODY: HAND, FOOT, BRAIN

So far we have examined mostly structural peculiarities that, although important as distinguishing features of the races of mankind, are of little significance in determining how man differs qualitatively from the apes.

We shall now examine those organs of the human body that have played the most important part in man's evolution. They are: the brain that developed under the influence of labour and articulate speech; the hand that developed into the organ of labour; the foot that took shape under the influence of erect locomotion.

According to Engels the basic factor determining the development of the ape into modern man was labour: "First labour, after it and then with it, speech—these were the two most essential stimuli under the influence of which the brain of the ape gradually changed into that of man, which, for all its similarity, is far larger and more perfect."²⁶

We may affirm that the brain possessed by representatives of all the races of mankind is equally well adapted to labour, and that those areas of the frontal, temporal and parietal lobes on which speech depends are developed to the same degree.

According to the theory of Academician Ivan Pavlov, the words used in articulate speech form part of the second system of signals that belongs to man alone. The first system of signals of surrounding reality that man inherited from his distant ancestors is something he has in common with all the higher animals, although it has changed

with the development of speech and consciousness, which are inherent in all the races of mankind.

The area of the cerebral cortex that controls the movements of the fingers is of great importance. It is in the lower part of the anterior central gyrus, close to the speech motor area; this area is equally extensive in all the races, is very highly developed and is differentiated into separate "centres" for each finger.

The area of the chimpanzee's cerebral cortex that is connected with the movements of the fingers is less highly developed. The individual fingers of the hand of the chimpanzee and other apes cannot function independently of each other and with great precision in the way those of man can. To understand this functional difference we must examine the hand of man and that of the chimpanzee.

The chimpanzee's hand is a specialised grasping organ that is remarkable for the strong development of the fingers in length, from the forefinger to the little finger; the ape can use them like a hook to hang firmly from a branch when moving through trees. The entire palmar surface and the lower parts of the fingers are abundantly supplied with sensory nerve ends and are completely covered with patterns of papillary, or prehensile, lines that prevent the hand from slipping when grasping the branch of a tree.

The thumb, however, is very small, almost rudimentary, and plays little part in grasping. The hand, therefore, is a specialised organ designed for brachiation, or swinging by the arms from branch to branch, and resembles a hook in use.

Although the chimpanzee, being a skilful brachiator, has a very highly specialised hand, the close similarity between it and the human hand, also fundamentally a grasping organ, is easily seen. Man, like the chimpanzee, possesses flat fingernails, and his palm is also covered with a pattern of papillary and flexor lines similar to that of the chimpanzee.

Man's thumb, however, is very highly developed and opposes easily to the other fingers. It is this peculiarity, together with the finely differentiated movements of the fingers, that characterises man's hand as the organ of work. The hand of man's anthropoid ancestor had not become too highly specialised, and enabled him to engage in forms of work in which grasping and holding objects played an important part.

As Engels pointed out, man's hand is not only the organ of work but also its product. Under the influence of work performed it changed

constantly in the course of evolution. The anatomical and physiological peculiarities of the hand that made it adaptable as an organ capable of work were transmitted by heredity, developed and accumulated from generation to generation.²⁷

Man's hand mastered the new functions it had to perform, but still retained its original ability to grasp objects and to help in climbing, an ability it had inherited from the earlier anthropoids.

None of the modern races is higher or lower than the others in respect of the structure of the hand, the most important organ that distinguishes man from the animals.

The hand and the brain developed under the influence of the most powerful of all social factors—social labour. This development, however, would have been impossible, and the way to it (and, consequently, the humanising of the ape) would have been closed if the hand of man's immediate ancestor had not been relieved of its function of supporting the body during locomotion on the ground.

The chimpanzee's hand is, first and foremost, an organ adapted to climbing trees. The feet perform a very important secondary function, especially in slow motion through the trees and on the ground and have, therefore, retained their grasping ability, with the big toe opposed to the others; but they are also suited to swift movements of the body when walking or running on all fours on the ground (it should be noted that not only the big toe but the other four are strong and well developed).

At a first glance the chimpanzee's foot closely resembles its hand since the big toe is placed at some distance from the others and is opposable to them. The existence of a heel, however, shows that it is a foot and not a hand although it is adapted primarily to grasping branches. The chimpanzee foot also resembles that of man in having flat toe-nails.

The relative size of the fingers and toes in man and the chimpanzee differs. Not only is the third finger of the chimpanzee's hand the longest, but the third toe of the foot is also longer than the other toes; then follow the fourth, second, fifth and first (thumb or big toe) in that order. Man's big toe is his longest (the formula is $1 > 2 > 3 > 4 > 5$), or, rarely, the second toe (formula: $2 > 1 > 3 > 4 > 5$). The fingers occur in the following order in man ($1 = \text{thumb}$): $3 > 4 > 2 > 5 > 1$, similar to those of the ape, or, in some cases, $3 > 2 \geq 4 > 5 > 1$. The big toe of the chimpanzee is incomparably more developed than its thumb.

The internal structure of man's foot shows still greater similarity to that of the chimpanzee. In man's foot there is the rudiment of a muscle that in the anthropoid serves the purpose of adducting the big toe; this muscle is made up of the transverse and oblique heads, the former being greatly reduced in man but having functional significance in the foot of the ape.

The feature of the human foot that mostly distinguishes it from that of the ape is the longitudinal arch which provides man with firm support in standing and in locomotion. It is well developed in all the races of man, but is absent in the foot of the chimpanzee.

The feet of people belonging to many tribes and nations, especially those inhabiting tropical and subtropical regions, often possess the ability to grasp. The people are accustomed from childhood to walking barefoot and picking up stones and other small objects from the ground and acquire great agility enabling them to use their feet in sewing, rowing boats and many other actions. As a result of lengthy practice the big toe acquires the ability to move away from its neighbour or press close to it; it also begins to bend more easily. The other toes also display a certain degree of independence and agility.

N. N. Miklukho-Maklai gave an interesting description of this agility among the Papuans: "I saw them hold various objects with their toes, pick them up from the ground, catch small fish in the water, remove bigger fish from the spear and even peel bananas."²⁸ Europeans and other people who habitually wear boots, often very tight ones, have feet that differ functionally and morphologically from the feet of those who live in the tropics and usually go barefoot.

Nevertheless the structure and functions of the feet are very similar among people of all races and variations are very slight, especially congenital variations.

The foot of the Neanderthal man was not so well adapted to erect locomotion as that of modern man. This is fully in accord with the shape of the spine, the cervical and lumbar curves of which were not so well defined as those of all modern races. In many respects the spinal column of the Neanderthal man bore greater resemblance to that of a chimpanzee or some other anthropoid than does that of modern man.

Let us sum up in brief the data that show the unity and biological equality of the modern races of mankind.

The brain of modern man is big and possesses strongly developed frontal lobes. In this respect all modern races differ not only from

the chimpanzee but also from the Neanderthalers whose brain had much more weakly developed frontal lobes.

The hand of the chimpanzee is distinguished by its small thumb. The thumb is powerfully developed among all representatives of the Europeoid, Negroid and Mongoloid great races and is opposable to the other fingers to an equal degree in all.

The foot of people of all races possesses a resilient arch that makes it an organ of support and not the grasping organ of the extinct apes that were man's ancestors; in the latter the big toe was opposable to the others and the foot could probably grasp objects with almost the same agility as the hand.

The modern races of mankind are, therefore, all at the same level in respect of the structure of such important organs as the brain, hand and foot, the organs whose progressive development is typical for the evolution of man. In this respect, as in a number of other important features, the modern races of mankind are all equally distant in type from their immediate ancestor, the Neanderthal man, and still more far removed from the anthropoid type.

The unity of the modern races is still more apparent in a number of biochemical features. This is especially obvious in the composition of the blood which it is practically impossible to distinguish as belonging to any particular race, despite the delicate methods of study that have been used.

Recognition of the biological equality of the races of mankind completely refutes the assertion of racists in some countries to the effect that the Negroid race in the opinion of some, and the Mongoloid race in the opinion of others, are stages in the development of the Europeoid race.

Now let us see how the different races of man originated and developed.

THE ORIGIN OF THE RACES

1. THE RACES OF MANKIND—THE RESULT OF HISTORICAL DEVELOPMENT

That the environment has influenced the development of the races is beyond all doubt. At the time primitive man existed the influence was probably much greater, but in the process of the formation of the modern races it was not so strongly felt although in certain features, skin pigmentation, for instance, it is still very obvious. Apparently it was the whole complex of living conditions that had the greatest significance in the emergence, formation, weakening and even disappearance of racial characteristics. This is the viewpoint that must be opposed to that of scholars who regard the formation of the races as the result of the reshuffling of unchanging gens.

As people spread over the face of the earth, they came up against differing natural conditions. Although natural conditions have such a tremendous effect on the species and subspecies of animals, they could not act so intensively on the races of man since humans differed qualitatively from animals in that they were constantly opposing themselves to the nature that surrounded them and transforming it in the process of collective work.

There is no doubt that in the course of man's evolution many racial features possessed an adaptive character which was to a large extent lost as the role of social factors increased and that of natural selection gradually lessened and then disappeared.

In the beginning the spread of man to new regions was of great significance, since many groups of people lived for a long time in different natural conditions, isolated from each other and eating different food. Later, as the human population increased, there was growing contact between the race groups with their consequent mixing.

Some authoritative anthropologists regard isolation and mixing as having interacted very considerably in the history of the races of early man. When an isolated group increased in numbers and spread to new areas, it often came into contact with other groups and mixed with them. This lessened the original degree of differentiation. As the groups of anthropological types mingled, the new mixed or contact groups became stabilised. As they spread farther to unoccupied or sparsely populated territory, geographical isolation was again felt and, as a result, there was a new differentiation of anthropological types. It is safe to assume that such processes were repeated many times and covered a period of tens of thousands of years of the development of modern man, who, as his numbers increased, rapidly populated all the unoccupied regions, as well as new islands and even continents such as Australia and America. In the end man occupied the entire land surface of the globe, his most recent acquisition being parts of the Antarctic.

Although adverse climatic conditions and natural barriers (high mountains, extensive dense forests, waterless deserts) hampered man's migration, they did not prevent it. Social organisation, labour, clothing, tools, weapons, fire and means of transport served to counteract those natural factors that usually have a differentiating effect on any species of animals. Here we may observe the sharp qualitative difference between the formation of the races of man in the course of history and the evolution of species or intraspecies subdivisions of wild animals.

It is all these factors that necessitate a special complex historical approach to the study of the races and the analysis of the bodily features that are typical of them. The development of each race took place under definite natural and social conditions that were organically connected. The history of the formation of a race, therefore, is the story of its emergence and development within a prescribed area under the complex influence of various natural and social conditions that affected the race concerned and determined the direction of its evolution. In this process the various bodily features that distinguished the race were combined to form new complexes.

Migration, isolation, increase in numbers, the mixing of anthropological types, and change in food habits were, together with natural selection, the main factors in the process of race formation among the ancient hominids. Appearing in numerous combinations and differing in their intensity, they conditioned the differentiation of the races, forming a network of anthropological types, at first sparse but later much denser, that were connected in varying degrees by transitional groups.

2. GEOGRAPHICAL AND SOCIAL ISOLATION

In the Lower Palaeolithic epoch the human population was sparse and had spread in various directions over huge territories that had vastly different climatic conditions and an abundance of natural barriers that prevented contact between people. In that epoch the factor of geographical isolation was particularly important.

The evolution of the bodily distinguishing features of racial groups isolated from each other by impassable mountain ranges, deep and wide rivers, deserts, etc., was apparently greatly influenced by climatic and other natural conditions.

It stands to reason that in the earlier stages of man's history, in the Palaeolithic epoch, geographical isolation played a particularly important role in changing the inherited features of some anthropological types. This increased the differentiation inside the ancient races.

Seen from the biological standpoint, the mechanism of procreation, the maturing of sex cells, impregnation, the formation of the organism and changes through heredity are the same for human beings as for the higher mammals. But the relations between people, the development of human groups and of mankind as a whole are determined primarily by social factors. This circumstance inevitably led to heredity in man differing from heredity in animals, thus providing one of the outstanding qualitative differences of the races of mankind.

At the time when primitive and early people were developing the races that took shape were to some extent comparable with local varieties in the animal kingdom, but as time went on, this resemblance grew less and less. The races of early man possessed far more specific features than modern man, especially those that can be regarded as typical local forms or as having taken shape under the influence of geographical, purely local, conditions. Such features are to be found in their most prominent form only in certain anthropological groups that live either on the outskirts of the habitable world or under conditions of isolation—on islands, in forests or in mountains, for example.

Man's geographical isolation was often combined with social isolation because of the conflicting interests of neighbouring groups, the absence of a common language and the clashes that could and frequently did take place even when the groups were racially identical.

We may well believe that because of geographical and socio-economic isolation, especially when the groups of primitive people were numerically very small, hereditary changes in many such groups were probably much more intensive than the changes in wild animals living in the same geological epoch.

The animal organism is adapted for life in a definite ecological niche*. The majority of its specific features are of a narrowly adaptive nature and ensure the preservation of the species. This accounts for the relative (changing as time goes on but nevertheless clearly defined) adaptive purposefulness in the structure and habits of animals.

In modern man, on the contrary, only a few and not the majority of his racial specifics are of adaptive significance. Nevertheless, traces of adaptation are still very clearly defined in, for instance, the pigmentation of the skin, the development of the fold in the eyelid, the thickness of the lips, the development of a subcutaneous fatty layer in the region of the cheekbones, and several others. It is true that today these features are of little importance in the struggle against adverse natural conditions when compared with the artificial means of protection that are available to man. We must never forget that man's direct dependence on natural conditions is constantly decreasing and, in some cases, even disappearing. The influence of the environment on the races of modern man and on species of animals is vastly different. Nevertheless, there are certain hereditary features in the structure of the human being, including some specific racial features, that can even today change under the influence of environment; the changes may take place fairly quickly, especially in cases of emigration from one country to another.

Metabolic processes were not identical in people whose living conditions differed. In the course of many generations living in the same natural and social conditions, the prevailing type of food inevitably brought about the development of some racial characteristics and the weakening of others.

It would seem that geographical and social isolation should always intensify the differentiation of human groups and direct them towards the formation of species. This was not entirely the case because the influence of work, life in a community and the mingling of groups

* By ecological niche we mean the place occupied by the species in the complex of animals and plants or in the biocenosis of a limited area. Each species, with its own biological peculiarities, makes use of conditions in the environment that are suited to it and evolves accordingly.

levelled out many of the differences that emerged in the course of evolution as a result of natural and social causes. This prevented the more profound differentiation of mankind into races. The obliteration of specific features typical for the development of races stands out in sharp contrast to the unhindered differentiation of the species of wild animals that is taking place all the time in nature.

Mankind constitutes a single biological entity, and each of the races is the result of a qualitatively specific course of development taken by one part of that single whole; the race, therefore, differs in essence from the species or subspecies of animals.²⁹ The latter display a more or less sharply defined complex of peculiarities in each taxonomic group, but individual diversions are relatively few. In man, however, racial differences are to be observed only by the study of comparatively large groups since individual variations are much greater than racial. The specific features of the races of man overlap differently from those of animal species and to a much greater extent, so that racial frontiers are easily crossed. From this it follows that racial diagnosis cannot always be applied in full to an individual, and may sometimes give no results at all.

3. NATURAL SELECTION

The geographical isolation of earliest man and of Neanderthal man was combined with other factors, especially with natural selection. It is, therefore, imperative that we consider its role in the formation of the races of mankind.

Some writers are of the opinion that natural selection plays an important part in the evolution of modern man. This opinion is held by the social-Darwinists, eugenists and racists who claim that a struggle between the races is the basis of the development of mankind.

There is another group of writers who take the opposite view and deny entirely the influence of natural selection in the evolution of man from the time the first men appeared (Pithecanthropus and Sinanthropus). We are of the opinion that this extreme view is also erroneous. Its partisans exclude the factor of natural selection from the process of the making of man and often replace it by the concept of "social selection", a favourite with the social-Darwinists.

Natural selection influenced primitive man and his racial groups to a gradually diminishing degree. Favourable and adverse natural

conditions affected primitive man not only through the medium of primitive society; their direct effect was still strongly felt.

Man's work, performed collectively by the community, lent his evolution a special character from the very beginning and directed it on to a path different from that followed by the animal kingdom. Work and life in the community, however, did not immediately make man independent of natural conditions. The social environment that could entirely overcome the factor of natural selection was not created immediately. Due consideration must be given to the low level of social development at the earliest stages of history, at the time of the primitive and the still underdeveloped civilisation of the Early Palaeolithic.

It follows from this that the races of man at the earliest stage of development and in the Neanderthal period still experienced the formative influence of natural selection even if by then it was in a subdued and not in a direct form. Natural selection functioned in combination with qualitatively new socio-economic factors but its importance grew less as the role of the latter increased.

In this respect the emergence of the modern races and their development are different from race formation in the Early Palaeolithic. In the latest stage of development racial specifics have built up into a complex of features that are only partially adaptive; natural selection has ceased to be a factor in the evolution of man. At the same time hereditary changes have become greater and more complicated. In various parts of the world, among groups of anthropological types, new features have developed under the combined influence of various natural and socio-economic factors. In the gigantic process of the most varied mingling of groups new combinations of anthropological features have made their appearance. The process of intermingling has shattered hereditary features and facilitated change.

In the later stages of the Upper Palaeolithic natural conditions did not have such a powerful effect on man as before, because the Cro-Magnon folk and other allied fossil groups of the modern type had a more highly developed community; the natural influence of the environment was outweighed by the more powerful effect of the social milieu. Racial types were formed as the influence of the environment grew weaker and weaker, so that the racial features of man became much less subject to adaptation, both relatively and absolutely.

4. INTERMARRIAGE

A good example of the influence of man's socio-economic development on the races is the process of intermarriage or mingling which has been going on for a long time and has now reached tremendous proportions (*see* Plates III and IV).

Many examples of the formation of mixed peoples and tribes are to be found in America, Africa, Asia and Australia. In Mexico about 60 per cent of the population of 33 million are the offspring of mixed marriages between Europeans and Indians, and in Colombia the same is true of 40 per cent of the 11 million population.

The crossing of the different races is easily effected and is not hampered by any anatomical or physiological barriers. The offspring are not only perfectly healthy, but they also produce normal children. It is well known that there exist large numbers of people of mixed origin—European and Negro (Fig. 35), Negro and Chinese, European and Japanese, American Indian and European, European and Australian. Triple and even more complicated mixtures of races in South America have been described; they include Negro, European and American Indian.

Some of the races have produced intermediate contact groups as a result of their mingling over a long period. An example of this is the Urals group (part of the Mansi and Khanti peoples). These groups were formed by the mingling of Europeoids and Mongoloids. The same is true of the Lapps (or Saam people) and the Mari people (*see* Plate V). At least half of mankind today consists of people who are to a great extent racially mixed.

The ease with which the races intermarry and the ever-growing numbers of people involved, is evidence that they have a common origin. This fact alone shows how groundless are the race theories that deny the blood relationship of people of different races.

When the races mix the majority of the racial features of their progeny have an intermediate character; this has been definitely proved by anthropologists. In the course of time permanent groups take shape that are known as contact groups.

The mingling of races is frequently due to one group multiplying rapidly as a result of socio-economic development; in spreading its territory it embraces neighbouring groups and assimilates them.

What has been said above about the influence of the mingling of races shows that a modern race is not a stage of development into a



Fig. 35. Mixed Negro and Abkhazian family from the village of Abziubzha, Ochamchire District, Abkhazian A.S.S.R. (photo taken in 1949)

(Seated, centre, Sofia Muzalia (about 112 years old), on her left is her son Shirin Abash, on her right her grandson Valery Abash; standing grand-daughters Nutsa Abash and Tsiba Chamba)

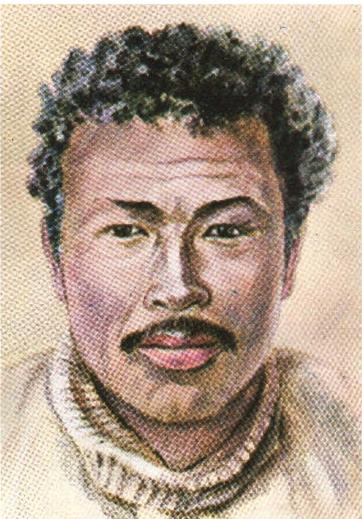
species. As soon as a race is formed it begins to mix with others. It is probable that some races underwent a much fuller development in the distant past. But even then the socio-economic factor, although much weaker than at later stages, modified the process of race formation, reducing some and strengthening other racial differences or complexes of differences. This explains to some extent the visible difference of the races; furthermore, the degree of independence of the races is conditioned by the extent to which they have been drawn into the process of mingling.

The process of intermarriage that started during the Upper Palaeolithic and became more intense in the course of subsequent millennia, led (and is still leading) to a progressive increase in the number of intermediate groups and to all races again developing into a single physical type. Intermarriage, therefore, ceases to have great significance for the differentiation of races.

Certain groups of anthropological types such as the Arctic (Eskimo), Pygmy, and Australian aborigine groups, were for a long period in complete isolation and this intensified the racial features peculiar to them. During the last five hundred years, however, even these comparatively



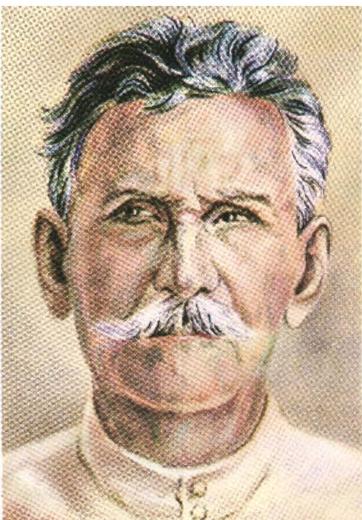
European-Negro



Negro-Chukchi

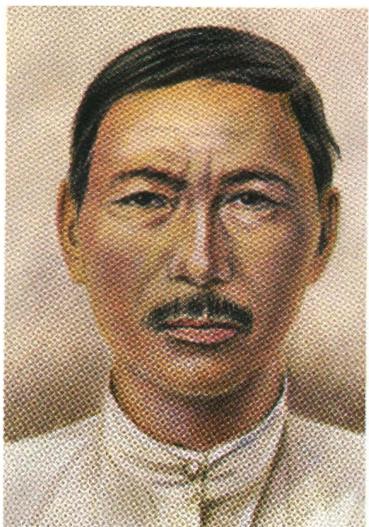


English-Polynesian

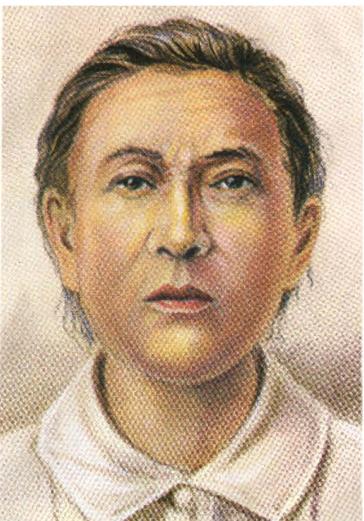


Dutch-Malayan

Offspring of marriages between representatives of Europeoid, Negroid and Mongoloid races



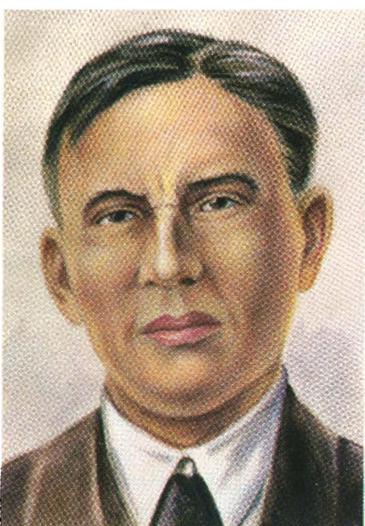
Russian-Buryat



Russian-Buryat



Italian-Japanese



Spanish-American Indian

Offspring of marriages between representatives of Europeoid and Mongoloid races

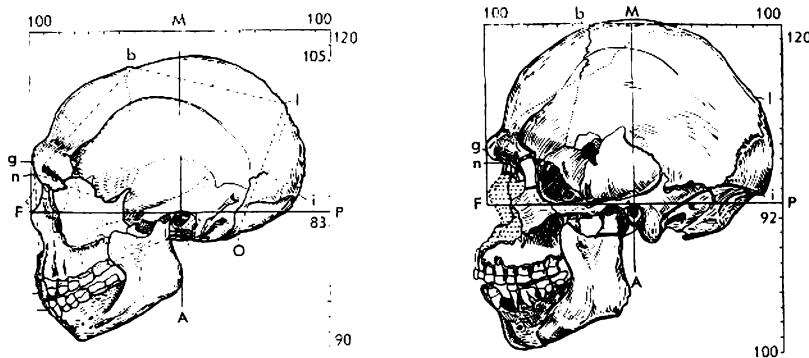


Fig. 36. Neanderthal skulls from the et-Tabun (left) and es-Skhul (right) caves

FP—Frankfort anthropometric horizontal; MA—vertical extended from the summit through the ear; n—nasal point (nasion); g—frontal point (glabella); b—point of intersection of transverse frontal and longitudinal parietal (sagittal) sutures (bregma); i—point of intersection of sagittal and transverse occipital sutures (lambda); i—point on the inferior-posterior edge of the occipital transverse ridge (inion); O—point on medial-posterior edge of occipital foramen (opisthion); measurements are in millimetres

isolated groups have lost their so-called "racial purity" so that today there are not really any "pure" races anywhere. The myth of the "pure race" is an invention of the racists that contradicts scientific facts. In any case, the degree of racial "purity", or of mixing of peoples never has played any role in their socio-economic and cultural development.

It is probable that races of fossil man also mingled, although not to such an extent as at present. Evidence of this is possibly to be found in the Neanderthalers unearthed in the caves of es-Skhul and et-Tabun on Mount Carmel in Palestine (Fig. 36), where there is a noticeable variety in the physical types of groups of ancient people. It is quite possible that the Neanderthalers or their offspring could have mixed with the groups of the modern type of man that were emerging.

The boundaries between the majority of racial groups have already been obliterated by the process of intermarriage. It is to be supposed that anthropological types and their groups will mingle and disappear more rapidly than the races and great races. Where there are large numbers of a great race living in a solid mass, the Chinese, for instance, or living in isolation like the Eskimos or Pygmies, they may remain relatively untouched by racial mixing.

In view of what has been said it is to be supposed that the factor of crossing will now have particularly great significance in the epoch of social and economic change that is taking place, an epoch in which racial barriers have been removed in a number of countries. We may draw one other conclusion from this—the effect of any factor in race formation changes very considerably in the course of the development of human society. At one time natural isolation and natural selection played an important part in race formation but later the mixing of races and anthropological types became the primary factor. One may even say that the mixing of races has ceased to be a race-forming factor and has become one that tends to eliminate racial differences.

To sum up: the development of man and his races proceeded under the influence of various factors, and the socio-economic factors in the end began to dominate over biological factors and even to force some of them to cease functioning.

The radical problem of the influence of the natural environment and of the social milieu on the formation of races should be examined from this point of view. Among the first men and among the Neanderthalers, the influence of the environment was much stronger and racial peculiarities were more of an adaptive character since natural selection was still functioning. The environment had less influence on the formation of the modern great races, although it was still noticeable. The present-day lesser races and non-contact groups reflect the effects of the environment to a still lesser degree, their specific features are formed more and more under the influence of the social milieu.

The relative importance of natural and social factors changes, both groups of factors exercise a combined effect in anthropogenesis and ethnogenesis and will continue to do so until the races finally disappear.

5. THE FORMATION OF THE GREAT RACES

The origin and development of the races of mankind is an extremely complicated process and we are still far from having reached a full solution of the problem. The general features of the process have, however, been outlined with considerable clarity in the works of Soviet anthropologists and we shall here try to give a brief review of the modern

concept of the origin of the races, their original home, the paths by which they spread and their kinship.

According to the view expressed by Y. Y. Roginsky³⁰ it is possible that in one of the final stages of the transformation of Neanderthal man into modern man, about 100,000 years ago, in the original home of modern man, that is, some regions of Asia and the contiguous regions of Africa and Europe, there evolved two basic racial groups—the South-Western and the North-Eastern. They were divided by the colossal mountain ranges of the Hindu Kush, the Himalayas and the mountains of Indo-China.

The South-Western branch produced the Europeoid and Negroid great races. The minor races of these two great races spread in all directions except the North-East.

The North-Eastern branch that produced the Mongoloid great race, whose specific features were not at first clearly marked, later split into a number of small races—the continental (North Mongoloid, Fig. 37), the Pacific (South Mongoloid) and the American.

The American Mongoloid race reached the New World across the dry land of what is now the Bering Strait. These three Mongoloid races formed the basis of the anthropological groups that later emerged on the Asian and American continents.

The Mongoloid great race is today linked up with the Europeoid great race through the Urals (Ural-Laponoid) and North-Eastern European groups of types. There is every reason to suppose that the Urals group was formed through the crossing of Europeoids and Mongoloids. It is probable that there were older and closer relations between these two great races since they are of common origin and came from a common homeland. Their earliest ancestors could be called

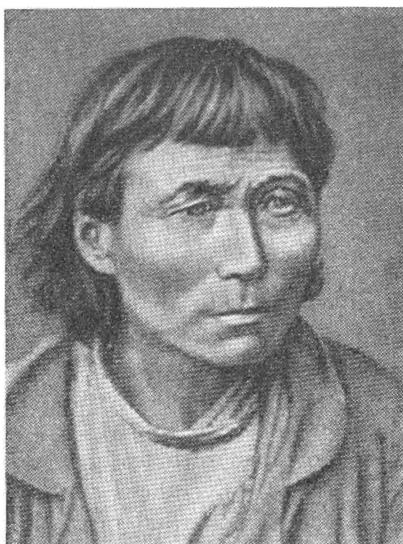


Fig. 37. Evenk (Tungus)
(Siberian or Baikal group of North Mongoloid race)

Proto-Mongoloid and Proto-Europeoid; the North-Eastern Proto-Mongoloid race probably spread in all directions except South-West.

This, in outline, is the picture of the genesis of the main races according to the conception supported by many Soviet anthropologists in contradistinction to the polycentric theory held, for instance, by Franz Weidenreich. His theory states that the modern races developed from local races of Neanderthalers in places far removed from each other in Europe, Africa, East Asia and Australia.³¹ In other words, he assumes that there were several centres in which the races took shape.

Y. Y. Roginsky³² put forward some fresh arguments in support of monocentrism. He studied a number of skulls of modern and extinct hominids, especially material available in the Moscow Museum of Anthropology, and extensive literary data on the subject and showed that the skulls of Neanderthal man and fossil modern man found within the bounds of one region do not display those signs of direct heredity that the polycentric theory would lead one to expect.

Another important argument is provided by the existence of numerous features of a non-adaptive nature among all the modern races that were not possessed by the Neanderthalers. The parallel, independent development of such features, some of them very tiny details, makes Weidenreich's hypothesis of the development of the modern races from local Neanderthal races highly improbable. The theory of polycentrism, therefore, finds no support in anthropological data. It must be added, however, that according to the opinion expressed by Y. Y. Roginsky,³³ the area in which the modern type of man came into being was a very extensive one and not a limited area as the bourgeois supporters of monogenesis would have us believe; on this huge area, furthermore, there occurred a mingling of various races and the emergence of intermediate forms.

Judging from the latest discoveries, the original home of modern man was a very extensive territory but there were no clearly-defined centres in which the great races took shape. The territory in question can be determined exactly only when many fresh discoveries of fossil hominids have been made.

Now let us examine the problem of the genesis of the great races from the standpoint of Soviet anthropology.

6. THE EUROPEOID GREAT RACE

The most likely hypothesis is that the main body of the Europeoid great race had its original home in the huge area that embraces South-West Asia, Southern Europe and North Africa. It is probable that the habitat of the Europeoids also included some parts of the steppes and foothills of Central Asia and Anterior Asia and, in part, the Mediterranean area with its dry maritime regions.

From here the Europeoids could spread in many directions, gradually occupying the whole of Europe and North Africa. These migrations apparently took place during the Upper Palaeolithic or even in later epochs.

It is, however, possible that the modern type of man took shape at the end of the Early Palaeolithic and that the process of absorbing the remnants of the Neanderthal people in the above and neighbouring regions began much earlier. This may be the explanation of the presence, in certain cases, of the remains of men of the modern type in almost the same strata as the later Neanderthalers.

Apart from the above-mentioned theory of the ways in which the Europeoids spread, there are some other theories. Some writers are of the opinion that in very ancient times a group of Proto-Europeoids penetrated into East Asia and gave rise there to a group of anthropological types that inhabited the seaboard of the Asian continent, Japan and the Kuril Islands. The Proto-Europeoid origin of this group, however, meets with strong objections on the part of Soviet anthropologists, who have put forward the hypothesis that the group, known as the Kuril group, is more likely to be closely connected with the Australoids (*see* p. 88).

The Polynesians have also been regarded as related to the Europeoids; it is alleged that their ancestors made the long journey to the South-East (through India and Indonesia to the islands of Hawaii, Samoa, Tahiti, and Tuamota) and occupied all Polynesia, including the two islands of New Zealand. Soviet anthropologists, however, have shown definitely that the Polynesians have a mixed Mongoloid-Australoid origin and now have the features of a transitional group (Figs. 38-40).

The desire to declare the Polynesians a "white race" can in many cases be traced to the "Aryan" race theory which claims that the North Europeoids originated in ancient days in India and Iran; that they played a leading social role in the development of mankind. In their

search for suitable anthropological types for their constructions, some supporters of the theory have not confined themselves to fair-skinned Europeoid types, but have even been prepared to accept as original "Aryans" the dark-skinned Europeoid groups and even non-Europeoids such as the Polynesians.

Rejecting the various hypotheses of ancient migrations of the Europeoids to the South-East or the East, we must look to nearer areas to build up a general picture of the development of the Europeoids and explain their relationship to other races.

First and foremost there are the questions of the relations between the Europeoid and Negroid races, the ways in which they separated and differentiated, as well as their mutual racial contact. There can be no doubt that at some time in the past these two great races formed a single whole. Evidence of this, for example, are the Upper Palaeolithic finds of two skeletons with Negroid features (the Grimaldi type, found in 1906) discovered in the Grotte des Enfants at Menton on the Franco-Italian frontier. At a later date the basic group split into two great races, the Europeoid and the Negroid.

These two great races then spread, in the course of tens of thousands of years, over various regions and continents with vastly different landscape and climatic conditions, varying degrees of heat, humidity, etc., and so developed very different racial features. Thousands of years of development in greatly different conditions led to the difference between the dark-skinned Sudanese Negro and the Northern or Eastern European with his weak pigmentation.

Between these two extreme groups of types of the two great races, however, there exist many transitional types that can only with great difficulty be recognised as Negroid or Europeoid. There is today a whole zone of intermediate types in the southern part of the Europeoid area.

In the Mediterranean area, North-East Africa and Southern India there are numerous transitional Europeoid-Negroid (or Negroid-Europeoid) groups of types: they compel one to forget that there are sharp differences between Negroes and Europeans. An excellent example of this is the East African or Ethiopian group of types (*see* Plate VI), in which inter-penetration of Negroid and Europeoid features is very extensive, although the Negroid tends to predominate (Figs. 41-42). It is here that the ancient kinship of the two great races of the South Western branch is most clearly demonstrated.



Fig. 38. Polynesian, Maori chief,
New Zealand

(Polynesian contact group of South Mongoloid race)



Fig. 39. Young Polynesian from
Samoa

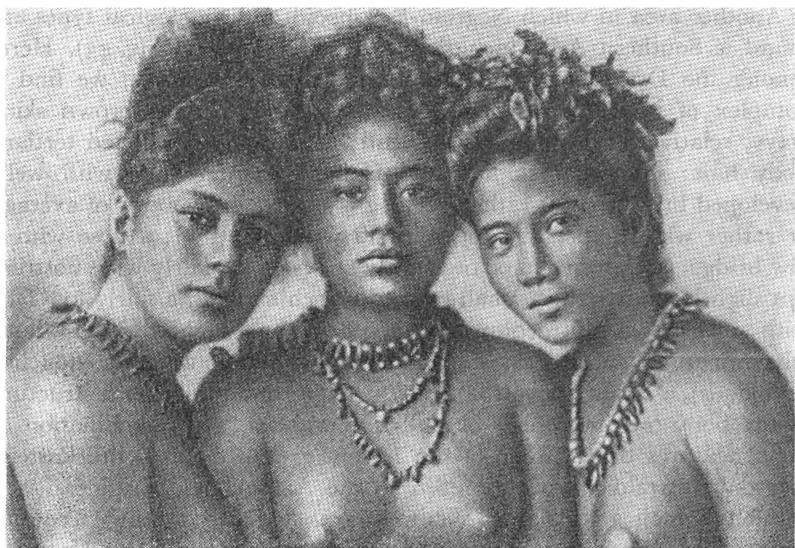


Fig. 40. Polynesian girls from Samoa

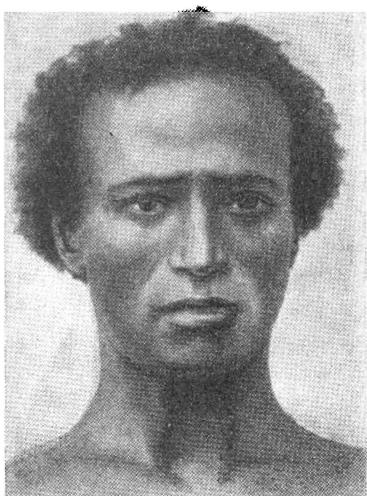


Fig. 41. Man of the Galla tribe,
Ethiopia

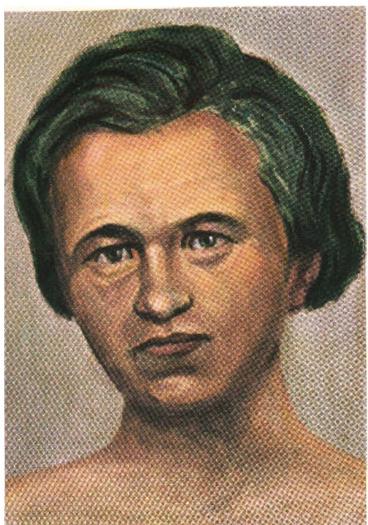
(East African group of the Negroid race)



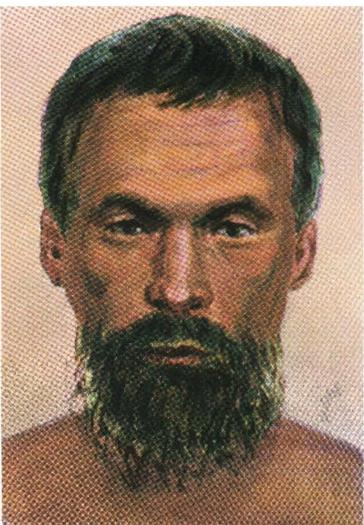
Fig. 42. Woman of the Amhara
tribe, Ethiopia

Another area in which Negroid-Europeoid anthropological types are found is Southern Asia, including India and Ceylon (Fig. 43). Here, among the Dravidians and similar anthropological types, we find a complex of racial features that includes dark, medium-brown skin; wavy, relatively thin hair on the head; moderately developed tertiary body hair; somewhat sloping and rather wide forehead with well-developed brow arches; rather deep-sunk orbits; brown eyes of average or rather wide shape, the upper eyelid without a fold; a nose with a low bridge, straight in shape or slightly convex with fairly wide nostrils; lips slightly thickened; a small or medium chin ridge; a fairly low face with cheekbones of medium development but slightly prognathous (the upper jaw projecting slightly); a high and long head (dolichocephalous), a trunk above the average length and the general structure of the body mesomorphous or dolichomorphous. This combination of racial features brings some of the Indian groups close to the Eastern Negroid-Australoid types, or even to the Australian aborigines.

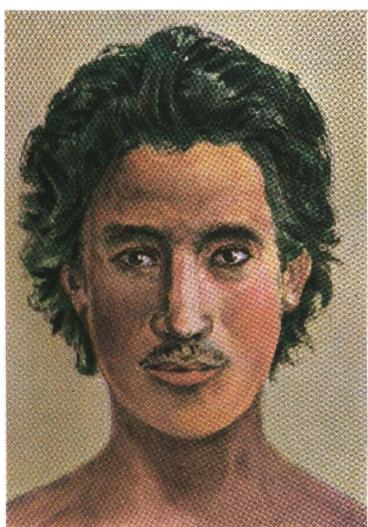
Such complexes of racial features are evidence of the close ties between some groups of types of the Europeoid and the Negroid-Australoid great races; and they show clearly that, although these races



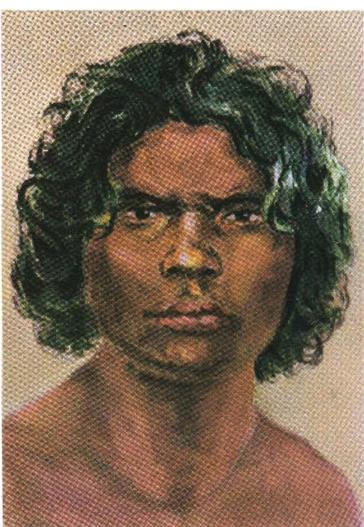
Lapp or Saam
(Urals group of North Mongoloid race)



Mari
(Urals group of North Mongoloid race)

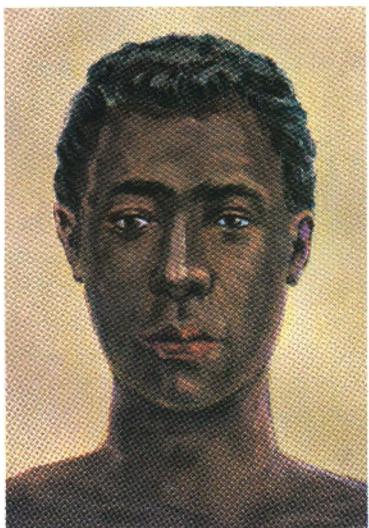


Arab
(Mediterranean-Balkan group of South Europeoid race)

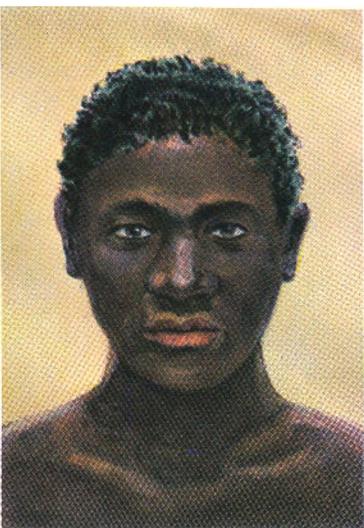


Vedda
(Ceylon-Sunda group of Australoid race)

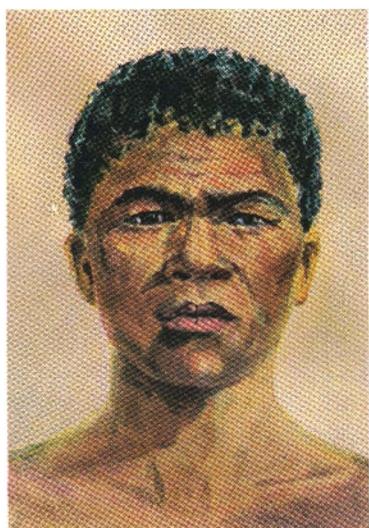
Plate VI.



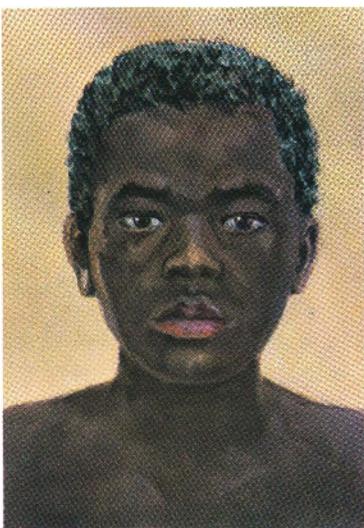
Ethiopian or Abyssinian
(East African group of Negroid race)



Babinga Negrillo
(Central African group of Negroid race)



Bushman
(South African group of Negroid race)



Semang Negrito
(Andaman or Negritos group of Australoid race)

have become clearly defined in the course of their historical development, they have not everywhere become completely separated. Furthermore, the progressively increasing process of inter-racial mingling is increasing the number of such complexes of mixed features in mankind.

In the tens of thousands of years of its existence, the Europeoid great race has undergone internal differentiation that has been partially due to natural conditions, such as climate, and partially to social factors (the growth of population, migration, the mingling of tribes and peoples, etc.). In this way the small or minor races took shape, and separate anthropological types were formed. Differentiation and the formation of the small races were accompanied by their intermingling, which is typical of the gradual slowing down of race formation, a process that never reaches completion. The intermingling of anthropological types disrupted and slowed down differentiation and led to a close connection between the Europeoid small races and to their intermingling.

The first of the Europeoid small races to take shape was the Mediterranean that was closely linked up with the original habitat of modern man. It is only natural that here man should have retained darker skin, eyes and hair, such as those that are typical of the Southern Europeoids (for example, the Arabs—*see* Plate V); they are very widespread over a huge area of Southern and, to some extent, Central Europe, North Africa, Anterior Asia, the Caucasus, Central Asia and the northern part of India.

In prehistoric times this region was inhabited by Upper Palaeolithic people of the Grimaldi (Fig. 44), Cro-Magnon and Combe-Capelle



Fig. 43. Tamil woman from Ceylon
(South Indian contact group)

(the Aurignac man) types. Of these it is possible that the Cro-Magnon developed later than the Grimaldi (Negroid) and Aurignac types. Upper Palaeolithic skeletons of the Europeoid type found in various parts of North Africa are closest to the Cro-Magnon type. As we have already mentioned, two skeletons similar to the Cro-Magnon have been

found in the Soviet Union, in the Murzak-Koba Grotto in the Crimea and in the village of Kostyonki, near Voronezh.

These give us only a general idea of the Palaeolithic ancestors of the modern Europeoids, mainly those of the Mediterranean area, and it is still difficult to find traces of the Europeoid small races in these remains. Specialists find obvious traces of the Europeoid small races in Neolithic skeletons; they even recognise some groups of anthropological types, especially because of the widespread development of the skull in the width and the acquisition of a more round shape (brachycephalisation).

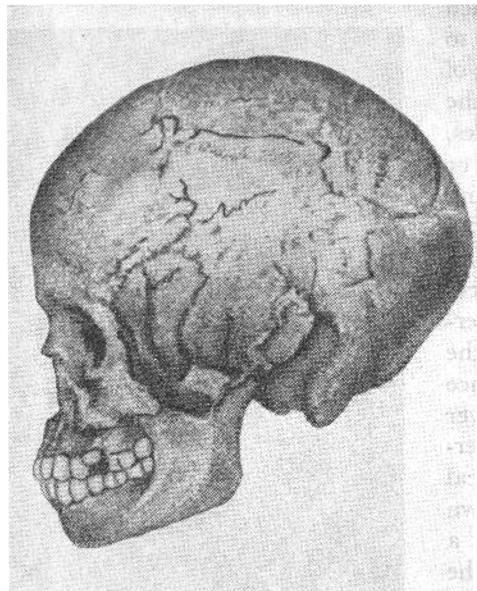


Fig. 44. Skull of a youth of the Grimaldi type (with Negroid features) from Grotte des Enfants, near Menton (1906)

Anthropological and archaeological data show that the North Europeoid race took shape later owing to the later arrival of its ancestors in Northern Europe, an area that had been covered with ice during the glacial period. The southern parts of Europe were not iced over so that people were able to live and develop there many thousands of years before they reached Northern Europe.

In the course of the twenty or thirty thousand years during which the Europeoids moved northwards, noticeable changes in their physical type were effected. Among the changes probably the most noticeable

is the loss of pigment or depigmentation of the skin, hair and eyes which is now typical of northern Europeoids. The causes of these changes are not quite clear, but they probably have something to do with the new conditions of the temperature and cold climatic zones.

We must here make the proviso that the North Europeoid or Baltic race, which took shape in relatively recent times, is not so clearly defined as far as racial characteristics are concerned as the South Europeoid race. It is more to be regarded as a group of anthropological types of different origin that underwent a process of depigmentation under the conditions obtaining in a colder and more humid climate.

Alongside the North and South Europeoid small races there exist a large number of transitional groups of anthropological types with varying pigmentation. They occupy a large area between the zones mainly occupied by the northern and southern small races (N. N. Cheboksarov, G. F. Debets).

7. THE NEGROID GREAT RACE

The majority of the groups of anthropological types living in the tropic zone belong to the Equatorial or Negroid-Australoid great race, which, as we have seen, is divided into two easily distinguished races—the African or Negroid and the Oceanic or Australoid (Fig. 45).

If we compare the Africans with the Australoid peoples we find that in addition to many astonishingly similar features there are many others that are different. In the first place, the body hair of the Negroids is poorly developed, in many cases is practically non-existent, while that of the Australian aborigines, the Melanesians and the Papuans is abundant. The hair on the head of the Negroids curls much more strongly than that of the Papuans or Melanesians whose children are born with wavy hair that curls as they grow older; the hair of adult Australians, as well as that of their children, is wavy.

The forehead of the African is straight with well-developed frontal lobes, that of the Indonesian Australoids has a medium slope, and that of the Australian aborigines a very considerable slope and the brow arches of the latter are usually strongly developed; the brow arches of the African Negroids are scarcely noticeable. The Africans have

apparently, in the shape of the forehead, deviated farther from the ancestral type than the Australoids. The development of the nose has taken the opposite path—the African Negroids have, as a rule, a flattened nose, while a straight or convex nose is typical of the Eastern Negroids, although that of some Melanesians is concave.

Thus the difference between the Negroids and the Australoids concerns mainly the hair, the brow arches and the shape of the nose.

In view of the preponderance of similar features these differences are not very great. They are probably to be explained by the different paths of the development of the Negroid and Australoid small races in regions that are vastly different and far apart.

It seems highly probable that at the beginning of the Upper Palaeolithic the original group of Australoid-Negroid types lived somewhere in South Asia, in Indo-China, India, or even farther to the west, and that they later split into the western and eastern branches and lost contact with each other.

If we assume the existence of such an ancestral equatorial race in the distant past, some 50,000 years or more ago, it is easy to imagine the

Fig. 45. Melanesian from the Solomon Islands
(Melanesian group of the Australoid race)

spread of differentiated racial groups, at first mainly in two directions, the south-eastern or Oceanic and the western, with a further migration to the south-west, to Africa, at a later date.

Migration was accompanied by changes in the stabilised racial types and the differentiation of new types. Among the Negroids the close waves of the hair developed into spiral curls, body hair began to disappear, the forehead became straight, the brow arches were reduced and in some representatives the nose became straight. As may well be imagined this was an extremely complicated process that we cannot yet define in detail because there is not sufficient anthropological and archaeological material available.

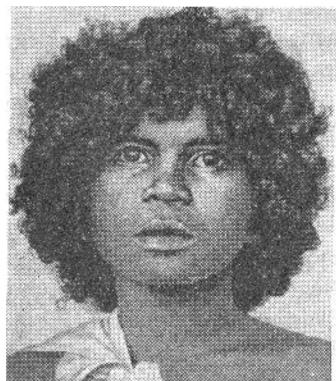
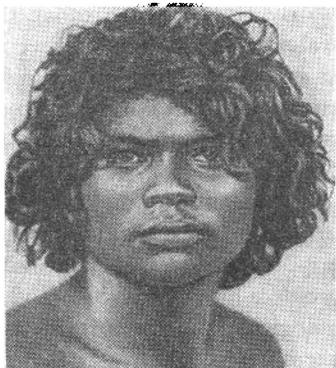


Fig. 46. Vedda—man (*above*) and woman (*below*)
(Ceylon-Sunda group of Australoid race)

We repeat that the similarity of the racial features of the Western (African) and Eastern (Oceanic) Negroid-Australoids is evidence of their kinship and common origin.

Two arguments are usually given in support of the autochthonous development of the African Negroid peoples independently of the Australoid types.

The first is the great distance between the territories occupied by the Negroids and the Australoids. This fact loses something of its significance when we remember the Ethiopian race that inhabits East Africa and the Dravidians and Veddas that inhabit India (Fig. 46 and Plate V),

two groups that are anthropologically fairly close to each other. The distance between the Negroid and Australoid races cannot be accepted

as evidence of a genetic difference between these closely-connected groups of dark-skinned people.

The second argument advanced in favour of the autochthonous appearance of the African Negroids is based on palaeo-anthropological sources; it ascribes excessive antiquity and primitiveness to the skeletal remains of fossil man on the African continent and recognises Negroid features in them.

The skeletal remains of ancient Negroid man have been found in relatively recent times. At the military post of Asselar*, deep in the Sahara Desert, an almost complete petrified skeleton, Negroid in type, was found in Pleistocene deposits (Fig. 47). The skeleton, however, belongs to the Late (Magdalenian) period of the Upper Palaeolithic. Judging by this skeleton, the Asselar man was no less than 170 centimetres in height; his cranium had a capacity of about 1,500 c.c. and the skull index was 70.9 (dolichocranial).

Another interesting find of a Negroid skull was made near Naiwasha in East Africa in 1939. The skull, however, is not old enough to be regarded as a special stage in the development of the

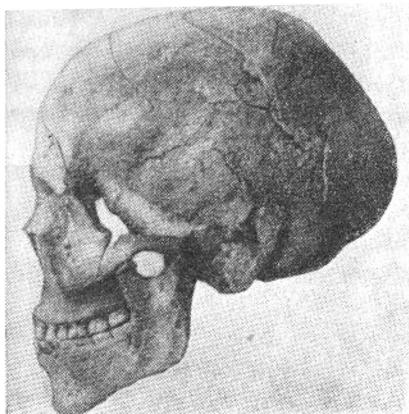


Fig. 47. Negroid type skull from Asselar, Sahara (1927)

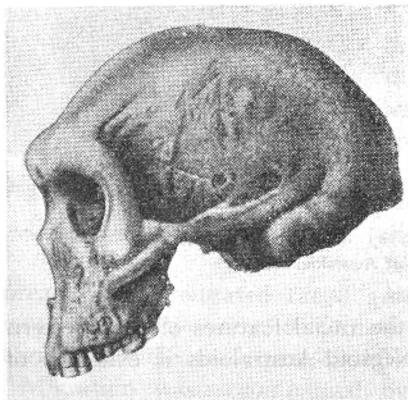


Fig. 48. Skull of the Broken Hill man, Northern Rhodesia (1921)

Naiwasha in East Africa in 1939. The skull, however, is not old enough to be regarded as a special stage in the development of the

* Four hundred kilometres north-east of Timbuktu and about 200 kilometres south-east of El Mabruk.

Negroid race; it displays racial features similar to those of modern Africans.

Champions of polycentrism usually place more reliance on two more primitive and, perhaps, older skulls found at Broken Hill (Fig. 48) in Rhodesia and at Lake Niarasa (Eyassi) in East Africa. The first of them, found in 1921, bears no resemblance to a Negroid skull and must be left out of account. Furthermore, its geological date is very uncertain. This skull resembles that of a Neanderthal; it has a powerful, over-hanging supra-orbital ridge, a sharply sloping forehead and powerful external relief. The foramen magnum is placed almost horizontally, near the centre of the base of the skull, as in modern man. The cranium has a capacity of about 1,200 c.c. The height of the Broken Hill man, judging by the shin bone (tibia) which is attributed to him, was about 180 centimetres. The Broken Hill find may indicate that an older group of hominids found its way into Africa, probably from Asia, did not evolve any further and eventually died out without leaving any descendants.

Nor do the skull fragments found on the shore of Lake Eyassi in East Africa in 1935 possess any Negroid features.

Thus no Neanderthal skulls with Negroid features have been found on the African continent.

Finds of Negroid skulls of Upper Palaeolithic age at Olduvai and Gamble (East Africa) may be taken as evidence of the penetration of Proto-Negroids from Asia into Africa. These ancient Negroids, distinguished by their relatively high face, are apparently closest to the Ethiopian group of anthropological types. The geographical position of these finds seems to indicate the migration of people of the South Asian ancient Negroid race having taken them to the west and southwest of Africa, from Arabia into Somaliland. Another probable trace of this migration of the South Asian Negroids westward, is in the find of several dozen skeletons made in the caves at Shukbah and on Mount Carmel. These are skeletons of people who lived in the Upper Palaeolithic (or Mesolithic).

The Asseler skeleton, judging by its structural features, is evidence of the kinship of the Eastern and Western Negroid-Australoids. The population of the zone which runs through North-East Africa, Anterior Asia, India and Indonesia to Australia has been, from ancient times to the present day, characterised by an interweaving of Negroid and Australoid racial features; there are definite traces, albeit at times scarcely

perceptible, that indicate the kinship of the African and Oceanic races, i.e., of Negroid-Australoid kinship.

One of the specific features of the Equatorial race is the presence of Pygmies in its composition; these dwarf anthropological types are unknown to either the Europeoid or the Mongoloid race. The African Pygmies are known as Negrillos and the Oceanic as Negritos (both words are diminutives of the word Negro).

The origin of the Pygmies is of great interest both to the study of the origin of races and of anthropogenesis.

There is a dispute of long standing between progressive and reactionary anthropologists on the question of the origin of the Pygmies. Reactionary anthropologists see in the Pygmies the most ancient of races, "the lowest of the low", an almost simian race that is doomed to extinction.

This point of view has been subjected to special analysis by Soviet anthropologists; its unscientific character and reactionary nature have been fully exposed. Both the western and eastern Pygmy groups possess great viability, do not show any signs of degradation and are biologically equal to any other group of anthropological types; they are capable of rapid and full cultural development.

Soviet anthropologists also refute the hypothesis of some scholars in other countries that regards the Pygmies as the ancestors of the entire human species. The earliest men were actually of greater height than the Pygmies (the Sinanthropus was from 152 to 163 cm, the Pithecanthropus about 170 cm). The Neanderthalers were also taller than the Pygmies, their height being 160 cm. The Pygmies, therefore, are not relicts of the first or second stage of human evolution. From this it follows that the smallness of these peoples is a secondary feature, one that is partial and local, since it occurs in only one and not in all the great races of mankind. In other words, the Pygmies, like peoples of greater height, are descended from representatives of the relevant anthropological types who were of medium height.

We shall begin with the features of the Negrillos,* under which name we combine the Central African, or Pygmy group of anthropological types (*see* Plate VI).

* The Negrillos live in the central zone of Equatorial Africa, in the dense tropical jungles. The Eastern Negrillos (Bambuti) occupy the Ituri region, the Central group (Batura) live in the Congo region and the Western group (Babinga) live in the area that was formerly part of French Equatorial Africa and also in the Cameroons.

The average height of a Negrillo does not exceed 150 cm. In some tribes the height of an adult male is as low as 140 cm and that of a woman 130 or even 125 cm. Not all the men have beards; tertiary body hair in some tribes is weakly developed, in others it has a medium development. The head is relatively big and is mesocephalous; the face is low but with round, high orbits. The eyes are brown, the lips are of medium thickness or even thin; the nose is flattened and the bridge is low or medium. The trunk is rather long when compared with the short legs; the skeleton of the hand is composed of fine bones (gracile). In general the Negrillos closely resemble their Negroid neighbours; their skin generally has dark pigmentation, the hair curls in spirals, the nose is very wide and the forehead is convex.

Now let us look at the specific features of the Negritos living in New Guinea, the New Hebrides and some other islands.

One group of New Guinea Negritos bears closer resemblance to the Melanesians, for instance, those of New Caledonia. Their height is 150-152 cm. Another group bears closer resemblance to the Papuans but the nose is broader; furthermore they are mesocephalous while the Papuans are dolichocephalous. These Negritos are shorter in stature, the men being as short as 144 cm; they may be regarded as a local variant of the Papuan group.

There are other groups of Oceanic anthropological types that bear resemblance to the Negritos, such as the Andaman Islanders, the Aeta, living in Luson in the Philippines, and the Semangs of the Malay Peninsula (*see* Plate VI). Some scholars place all these Negritos in a single group of anthropological types. These types, however, are all of different origin and the areas they inhabit are widely separated; they can scarcely be regarded as a single group. We must stress the fact that the Senoas of Indo-China, whose average height is 154 cm, possess racial features very similar to those of the Veddahs; they have a wide nose, and yellowish-brown, sometimes dark-brown skin and the hair on the head is long and wavy.

The opinion that the New Guinea Negritos developed from the Melanesian group of anthropological types is rather well substantiated. At least one fact indicates this; the Tapiro Pygmies of New Guinea are connected with the Arup tribe living in the north of the island whose height averages 160 cm; the transition from one group to another is gradual and scarcely noticeable. Other tribes of short stature also seem to have descended from neighbouring tribes or to be a mutation

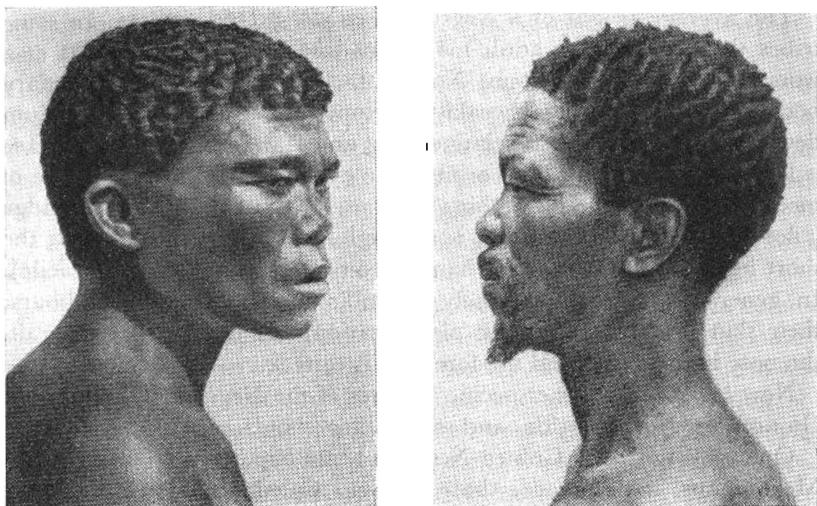


Fig. 49. Bushmen from the Kalahari Desert—youth (*left*) and man (*right*)
(South African group of Negroid race)

of the remnants of groups that at some early date migrated from Indo-China or South China through the neighbouring islands of the Malay Archipelago towards the south-east and gradually halted on their way and settled down where they became isolated in mountains and forests.

The regions inhabited by the Negrillos and Negritos are separated from each other by distances ranging from 10,000 to 15,000 kilometres. How is distribution over such an extensive area to be explained if we accept the theory that they are descended from a hypothetical dwarf race that occupied some intermediate area in South Asia? How could the Proto-Pygmyes have migrated to the south-east and south-west? Such an assumption is shown to be untrue by the fact that no fossil remains of dwarf people have been found in South Asia.

In Africa, the Bushmen are short in stature and are close to the Pygmies (Fig. 49); they form part of the South African or Bushman group of types. This dwarf race (averaging 152-155 cm) has almost completely died out, some thousands of the Bushmen having been preserved in the remotest parts of the dry savannahs of Kalahari and farther west, in the Numib Desert between the Orange and Kunene rivers.

Apart from their small stature, the Bushmen possess other features similar to those of the Pygmies—relatively short legs (compared with the trunk), a rather large head, flattened and very low face, a straight low forehead, weakly developed brow arches, protruding cheekbones, a nose with a low bridge and broad wings, a poorly developed chin (*see* Plate VI).

Other typical features of the Bushmen are: yellowish skin (female lighter than male); wrinkled skin on the face; the hair on the head is black and more tightly curled than that of African Negroes; tertiary hair on the face and body is almost completely absent; the eyes are brown and folds are well developed on both the upper and lower lids but the epicanthus is usually absent; the lips are thick and the upper lip projects; the lobes of the ears are joined to the skin of the head and do not hang free.

The colour of the skin, the folds on the eyelids and the somewhat flattened face give the Bushmen some resemblance of Mongoloids to whom, however, they are not closely related. The fold on the Bushman's eyelid is different in structure from that of the Mongoloids. The similarity is purely formal and is no doubt due to similar conditions of life in desert places.

The majority of the Bushman's racial features relate him to the Sudan (or Negro proper) group of types, the Bushman being, apparently, a variant of lighter skin and shorter stature. The view that they are of Negro origin is not contradicted by the accumulation of fatty tissue on the buttocks (*steatopygia*), a feature found also among other African anthropological types—among the tribes of the Somali Peninsula, for instance. *Steatopygia* is most highly developed among the Bushmen's neighbours, the Hottentots.

Anthropological data on the relationship between the Bushmen and the Negroes are complemented by archaeological data. The ancient drawings and some carvings of animals and human beings found all over South Africa and in some parts of East Africa, are very similar to Bushmen's drawings. This indicates that the Bushmen were once very widespread in Africa and may possibly be one of the oldest groups of the population of that continent.

Palaeo-anthropological data also confirm the relationship between the Bushmen and the Negroid-Australoid races. A skull unearthed at Cape Flats (near Capetown), and described in 1929 is dolichocranial, with a sloping forehead and powerful brow arches; the nose is broad; the height of the owner is estimated at about 168 cm.

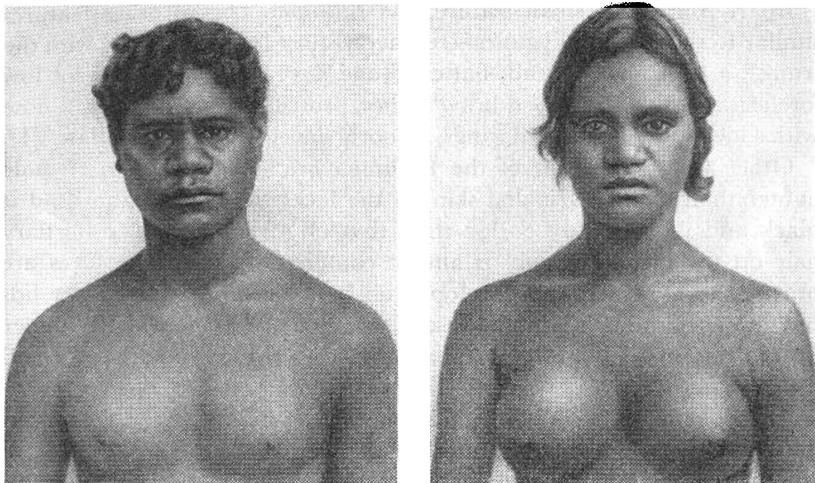


Fig. 50. Australian aborigines from Queensland: youth (*left*) and girl
(Australian group of Australoid race)

The Bushman group of types, therefore, undoubtedly belongs to the African Negroid race. Its position may seem to be somewhat isolated, but this is only further evidence that philogenetic relationship is not always shown by purely external features.

This must be borne in mind particularly when examining the groups of anthropological types that make up the Australoid race, of which the Australian group is the most typical. The aboriginal inhabitants of Australia developed under conditions of very lengthy geographical isolation on a relatively small continent, poor in nature and far removed from the Asian mainland.

The racial features of the Australian aborigines, taken as a whole, show that they are most closely related to the Negroid type, although the wavy hair, well-developed face and body hair and a number of other specific features lead one to think that there might be some distant relationship with the Europeoid types. It would be more correct to assume that these features developed independently of close relationship with Europeoids, similarly to the intense body hair of the Ainu (Kuril Islanders).

The Australians (Fig. 50) are not isolated from other Australoid groups. They bear the strongest resemblance to some Melanesians

(see Plate VII), to the New Caledonians, for instance, who have well-developed body hair and hair on the head that is close to wavy. Other groups akin to the Australian aborigines may be traced farther to the north-west, as far as India and Ceylon, where the anthropological types similar to the Australians, the Veddahs and Dravidians, are localised. It is interesting to note that the Dravidians have many features resembling those of the Ethiopian group of types. Thus there is a genetic link, obviously a very ancient one, stretching from the Europeoids, not only to the African Negroids, but also through India to the Oceanic Australoids.

It is possible that groups of types close to the Veddah type of Ceylon, took shape in South-East Asia towards the end of the Stone Age. This is to some extent confirmed by finds of bone remains in Indo-China and Indonesia.

In 1936 a skull from North Indo-China belonging to the Mesolithic epoch was described; at Tampong, in Upper Laos, a female skull together with a skeleton was found, the bones being apparently about 5,000 years old.

This skull showed the most amazing combination of the features of all three great races, but the strongest features are Australoid and South Mongoloid.

Neolithic skulls found at Guva Lava, on Java, are more reminiscent of Australian and Papuan skulls.

The south-east corner of the Asian continent was most likely the original home of both the Australian and Melanesian groups of types. From Indo-China the ancestors of the Australians migrated, probably in the Upper Palaeolithic, through the Molucca Islands, Ceram and New Guinea to the York Peninsula in Australia, or they may have taken the more southern route through Java, Celebes and Timor to the north-western seaboard of that continent.³⁴

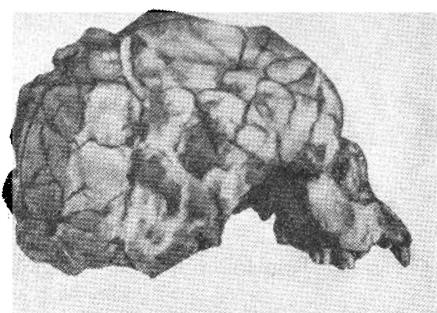


Fig. 51. Skull from Talgai, Australia (1925)

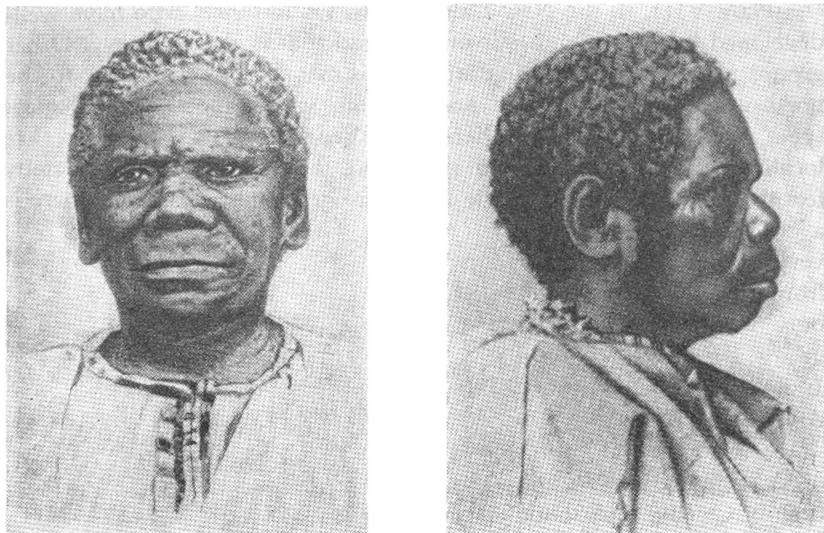


Fig. 52. Tasmanian women, Truganini (*left*) and Patty O'Kooneana
(Melanesian group of Australoid race)

As they spread through the fertile parts of eastern Australia, they probably met with representatives of Tasmanian anthropological types who arrived in Australia before them and some of whom had already crossed the Bass Strait to Tasmania.

This assumption is to some extent supported by finds of fossil forms. A skull from Talgai (Fig. 51) is that of an adolescent 14-16 years of age; another skull, found at Kohuna, belonged to an adult. They are dated geologically at approximately the end of the Ice Age. They resemble the skulls of Australians, not only in shape, but also in their relatively small capacity which, among modern Australian aborigines, averages 1,300 c.c.

The more complete skull of an adult was found at Keilor. Geologically it is dated as belonging to the Ice Age, at the time of the last glaciation. The shape and large capacity of this skull (1,590 c.c.) make it greatly different from the other two Australian skulls; it more closely resembles the two Wadjak skulls found on Java in 1890 by the Dutch scientist Eugène Dubois (who later discovered the Pithecanthropus); the capacity of the cranium of the better preserved of the two (that of a male) was 1,650 c.c.



Fig. 53. Descendants of marriages between Europeans and Tasmanian women

The Wadjak skulls apparently belonged to the ancestors of the Tasmanians and confirm the theory that the Oceanic race reached Australia in very ancient times. (It is also in harmony with the fact that the Australians reached the south-east corner of the continent much later than the other coastal regions.)

The Tasmanian group of anthropological types is of no less interest than the Australian group. Unfortunately, there is not a single Tasmanian left alive today. At the time of the discovery of Tasmania its

population numbered about 15,000. The last Tasmanians were transported by the British to Flinders Island where they died out; the last of them Truganini (Fig. 52) died in 1876. It has recently been discovered that a group of Tasmanians reached another island where the last of them died somewhat later, in 1893. Several Tasmanians were taken to the southern coast of Australia where they mingled with the Australian aborigines and with Europeans (Fig. 53).

The Tasmanian anthropological type may today be judged only from descriptions, pictures, busts (moulages), skulls and other remains. The hair on the head was curly. The face was very low, the eyes were sunk deep in their orbits, the vertical diameter of which was not very great; the vertical fold between the nose and the upper lip was very pronounced, mainly because the skin of the upper lip was rather distended and considerably raised. These features give the Tasmanians an appearance peculiar to them. The cranial vault was not very high but the capacity of the cranium averaged about 1,400 c.c., which is quite large. The features listed above are sufficient to tell us that the Tasmanians differed very greatly from the Australian aborigines.

The Tasmanians reached Australia in very ancient times, much earlier than the Australians, and probably moved along the eastern coast where the land is more fertile and, in the end, crossed the strait into Tasmania. There they found asylum in the isolation of the island for many thousands of years, while those who remained on the mainland were probably exterminated by the Australians. It is probable that the ancient skull found at Keilor is evidence that the Tasmanians once occupied the south-eastern corner of the country. In any case the Tasmanians are among the most ancient inhabitants of Oceania.

Some writers are of the opinion that the Ainu (or Kuril) group of types also belongs the Australoid race (*see* Plate VII).

This small group of a few thousand people living today in Japan has given rise to many disputes among specialists. Some anthropologists pay greatest attention to the Mongoloid features of the Ainu—light, yellow skin, the epicanthus possessed by many of them, the flat somewhat projecting (mesognathous) face, the weak development of the canine depression.

Others stress the resemblance of the Ainu to the Australian aborigines—the rich growth of hair on the head and body which is somewhat stiff, the sloping forehead, the nose wider at the base than is customary among Mongoloids, and the thick lips.

Whichever viewpoint is taken, the Ainu certainly do not belong to the Europeoid race, as some scholars abroad maintain; there are those who wish to see Europeoid features even in the Polynesians and other groups without having sufficient grounds for it. Soviet anthropologists, in view of the relative importance of the various physical features of the Ainu, the specifics of their language and culture, their distant past and their migration from the south, have drawn the conclusion that the Ainu were originally an Australoid type that acquired new features through mingling with the Mongoloids of South-East and East Asia.

8. THE MONGOLOID GREAT RACE

As we have said, the original home of the Mongoloids was most likely in the eastern half of Asia. This area was not isolated; the Mongoloids were connected, even if to no great extent, with the Europeoid and Negroid great races through the mountain passes, valleys and lowlands; this was true both of those who lived in the interior and of those who lived in the southern part of the continent. By assuming that the ancient Mongoloids spread to the north-eastern parts of Asia from the south and south-east, we find further support for the idea that there existed a profound and very ancient kinship between the Mongoloids and both the Europeoids and the Australoids. In view of this the formation in North Asia of such contact groups of types as the Urals (Ural-Lapp) group and also those of South Siberia must be regarded as having been a later process that occurred after these regions had been freed of the ice after the last Ice Age.

What was the racial type of the Proto-Mongoloids? Is the yellowish-brown skin the result of a certain depigmentation of the darker skin possessed by ancestors living in more southern regions?

The answer to the last question is probably in the affirmative. As far as the original racial type is concerned, the Proto-Mongoloids probably did not possess the specific features that mark the Mongoloid great race today. This is partly confirmed by the fact that some peculiarities of the face, nose and eyes in modern Mongoloids took shape at a later date. Such features as the powerful development of the cheekbones with local thickening of the subcutaneous fatty tissue, the not quite horizontal position of the eyes, the outer angles being somewhat higher than the inner, and the presence of the epicanthus, are not clearly defined in all

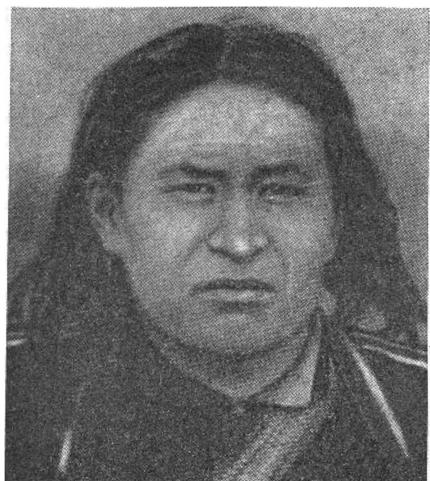


Fig. 54. Ket
(Siberian group of North Mongoloid race)

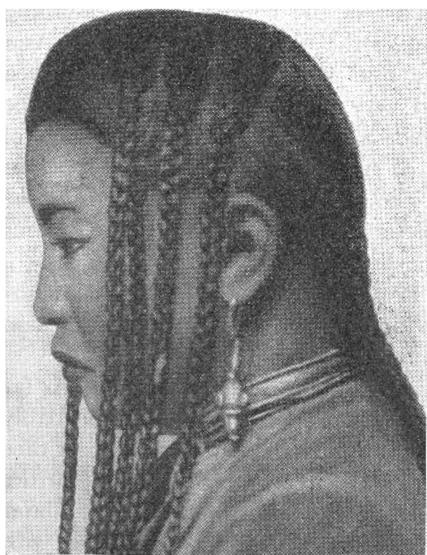


Fig. 55. Woman from the Tuva
Autonomous Region
(Central Asian group of North Mongoloid
race)

Mongoloid groups. The epicanthus, for example, is found in only a small percentage of people in some Mongoloid groups, while among the Kets of the Yenissei area and the American Indians it is very rare.

It is possible that the complex of more specific features developed among the Mongoloids under conditions of life in steppe and desert areas as a defensive adaptation to nature. This viewpoint is upheld by S. A. Semyonov, among others.³⁵ The narrow eye-slit and its small length (resulting from the highly-developed fold on the upper eyelid with its epicanthus) Semyonov explains as a real adaptation to the conditions of the continental climate in the home of the Mongoloid race. Cyclonic activity, the desert country, dust and other natural factors had their effect on the human organism over a period of many thousands of years. To this must be added another factor: throughout the long winter the country is covered with a blanket of dazzling white snow; producing a very intensive albedo (light reflected from a bright surface) that also had its effect on the development of the eye.

The defensive reaction of the human organism under

similar circumstances led to the formation of protective devices for the eyes, not only among the Mongoloids, but also among the Negroids—the Bushmen living in the desert regions of South Africa.

In the interior of the Asian continent, therefore, there grew up the Northern, or Continental Mongoloid race (Figs. 54 & 55) that today occupies almost all of Inner Asia and Siberia with their greatly varied anthropological types; the latter include transitional, or contact groups that were formed as a result of intermingling with Europoids. Anthropologists distinguish typical Siberian and Central Asian groups of anthropological types (for instance, the Evenk—*see* Plate VIII). The transition from the northern to the southern Mongoloids is through two groups—the Far Eastern or East Asian (the Northern Chinese, Manchurians, Koreans and others) and the Arctic groups (Chukchi—*see* Plate VIII—and Eskimos).

The South Mongoloid or Pacific race (Fig. 56 and Plate VIII, Malay) consists of the South Asian group of types widespread among the peoples of Indonesia, Indo-China and partly in South China, Korea and Japan. This entire group probably resulted from intermingling with Australoid anthropological types. Some anthropologists have noted the closeness of this group to the Ceylon-Sunda group of anthropological types (Fig. 57) for whom a darker skin, wider nose and thicker lips are typical. The Polynesian group is fairly close to the South Mongoloid and is of contact origin since both Mongoloid and Australoid ancestors took part in its formation. The similarity between the Polynesians and the South Mongoloids is shown by the following features: straight (sometimes stiff) black hair on the head, weakly developed tertiary body hair, yellow-olive skin, somewhat flattened face which is often very wide and high.

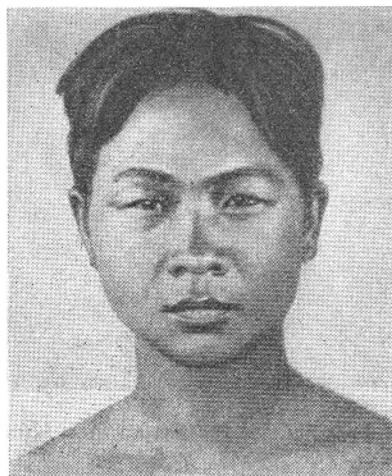


Fig. 56. Young Chinese from Kwangsi
(South Asian group of South Mongoloid race)

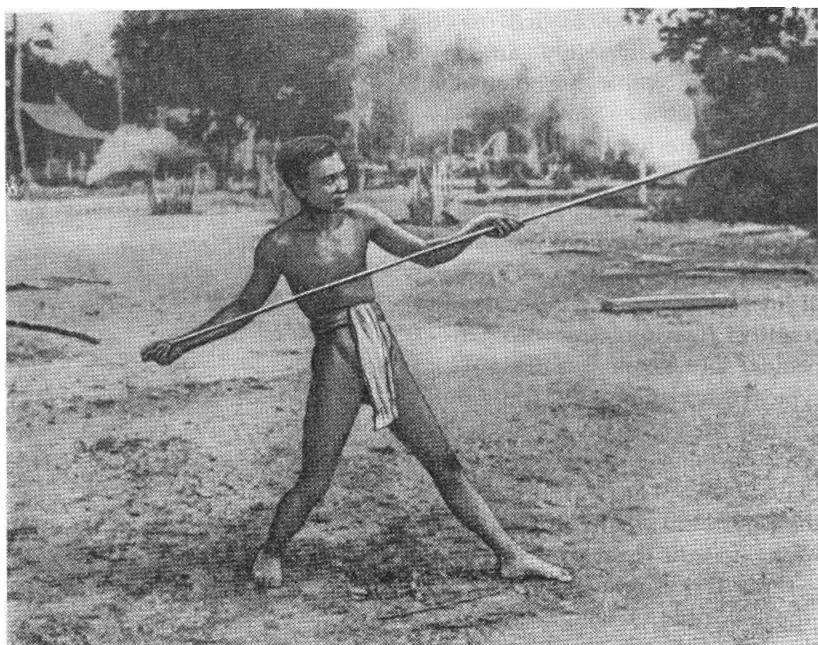
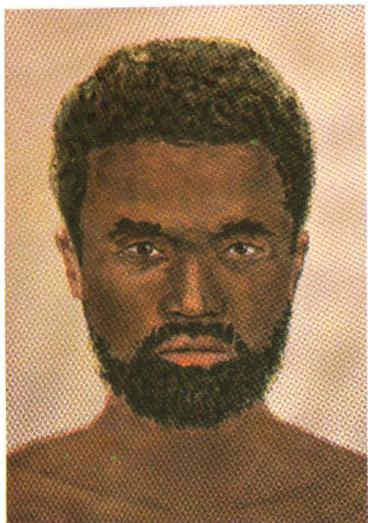


Fig. 57. Indonesian from Kubu tribe, Muara village, Sumatra

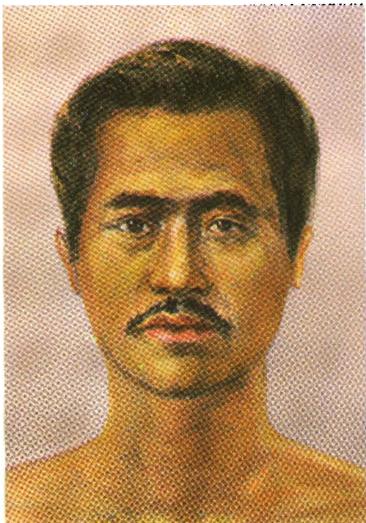
Similarity with the Australoids is shown by the broad nose, slight prognathism and thickened lips. The opinion that the Polynesians are connected with the Europeoids has no apparent grounds.

It is believed that the ancestors of the American or Red Indian race began their migration to North America and then from North to South some 25,000 or less years ago. The probable road they took was from Asia across the Bering Isthmus that formerly existed where the present straits are situated. This isthmus became approachable only at the time the glaciers were receding; until that time the entire American continent had been almost unpopulated since only a few groups are likely to have reached there from North-East Asia (and, as some scholars believe, from North-West Europe) during the Ice Age. After the ice disappeared the straits were unpassable and the Mongoloids who had migrated earlier remained isolated from the rest of the world in the same way as the Australians had become isolated at a much earlier date on their own continent.

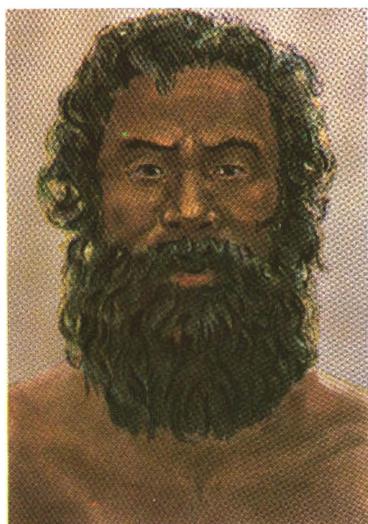
Plate VII.



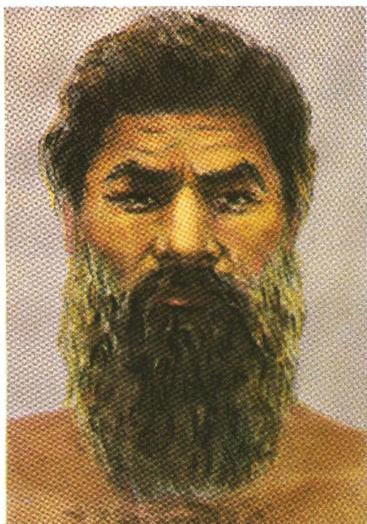
Melanesian
(Melanesian group of Australoid race)



Polynesian
(Polynesian contact group of South Mongoloid race)

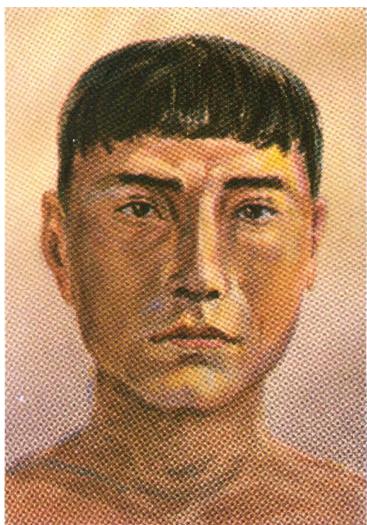


Australian
(Australian group of Australoid race)

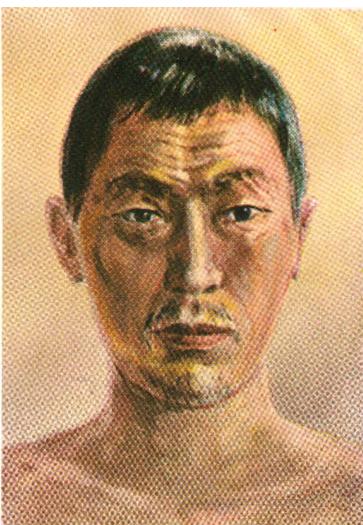


Kurilian or Ainu
(Kuril or Ainu group of Australoid race)

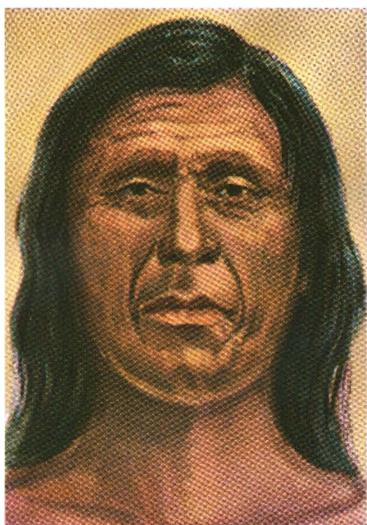
Plate VIII.



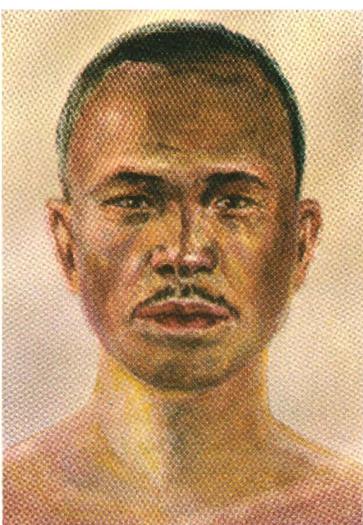
Chukchi
(Arctic Siberian group of North Mongoloid race)



Evenk
(Siberian group of North Mongoloid race)



North-American Indian
(North-American group of American Mongoloid race)



Malay from Java
(South-Asian group of South Mongoloid race)

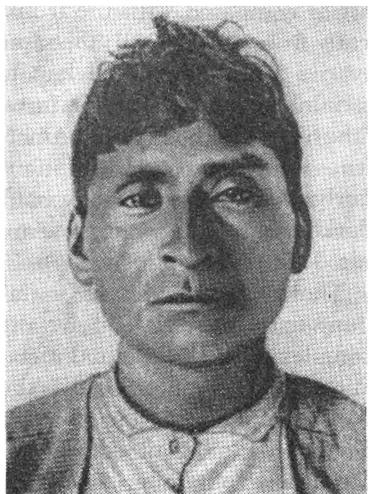


Fig. 58. Aztec Indian from Mexico
(Central American group of American Mongoloid race)

The Red Indians gradually spread throughout the American continent and for many thousands of years developed completely isolated from the influence of the Old World. In particular, they were unacquainted with the wheel and the plough and had no riding or draught animals. Nevertheless some American Indians reached a high level of development, as we know from the civilisations of Peru, Mexico and Yucatan.

To decide with which of the Mongoloid races—the Northern (Continental) or Southern (Pacific)—the American Mongoloids are most closely associated, we must first examine their anthropological features.

The majority of the Indians (Fig. 58, Plate VIII) have straight, stiff, black hair, the tertiary hair is very weakly developed, the eyes are brown, the skin is yellowish-brown, the face is broad and the forehead straight or slightly sloping; the eye-slit is moderately wide, there is a fold on the upper eyelid, but the epicanthus is very rare and found only in men; the nose has a very high bridge and is usually aquiline (rarely straight) and the base is of average width; the lips are medium, sometimes thick; the chin is medium; the jaw has moderate and sometimes weak projection so that mesognathism predominates although there is some orthognathism; the body proportions are mesomorphous or brachymor-

phous, i.e., the legs are medium or short as compared with the trunk. The height of individuals varies very greatly from short to tall; the same is true of the shape of the head which varies from dolichocephalous to brachycephalous. There is noticeable variability also in other features. Among some American Indians, among the Siriono tribe in South America,

for example, wavy hair, fairly well developed body hair, darker skin and a wider nose are met with.

These very considerable variations may be explained by the complexity of the original racial and tribal composition of the Indians and also by their having developed under all the natural conditions obtaining over the vast territory from Alaska in the north to *Tierra del Fuego* in the south.

The Indians probably reached America before the Mesolithic, evidence of which is found in their bone remains and cultural relics.

At that time the Proto-Mongoloid race from which they sprang probably did not possess fully developed specific features such as the majority of the present Mongoloids on the Asian continent now possess.

In the relatively short time that has elapsed since the Mesolithic (or Late Palaeolithic) in which the conditions of the natural environment have remained stable, the American Indians have not lost their ancient anthropological features and have not acquired all those that are typical of Mongoloids.

The wavy hair of some Indians (Fig. 59) shows the undoubtedly admixture of some ancient type, closer to the South Mongoloid race. There are some other data that confirm this. Some Soviet anthropologists

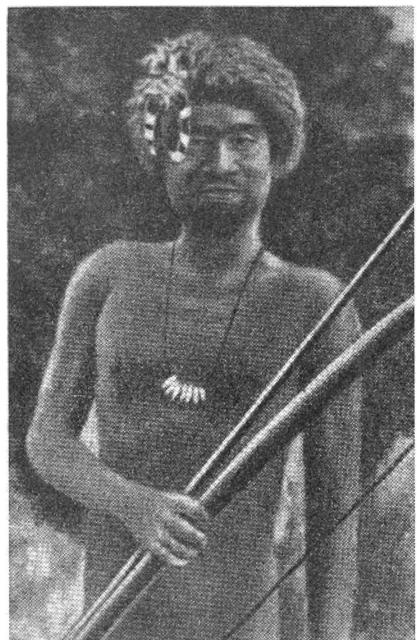


Fig. 59. Kurungua Indian from
Rio Pirai, East Bolivia
(Patagonian group of American Mongoloid
race)

(N. N. Cheboksarov) are inclined to regard the Indians as being of mixed origin in which both the Northern or Continental and the Southern or Pacific Mongoloid races had a share. It is probable that the southern branch had a greater influence in the formation of the American Indian race, because features of the Southern Mongoloids are more frequently met with. The Indians may also be compared with the Polynesians, if the Australoid features of the latter are disregarded. It is not without some reason (even if mistaken) that some scholars find traces of the Europeoid in the faces of both these groups. We may, therefore, ask: is not this distant similarity due to the Polynesians (*see* Plate VII) and the American Indians having descended from a single ancient group of types?

In examining the problem of the dependence of racial features on the varied natural conditions of the New World, we must to some extent contrast the Indians of the tropics and subtropics to those of the northern and southern temperate zones.

Some features are found among the tropical and subtropical group of types that are unknown to the Indians of temperate zones. Many Indians of Brazil and Bolivia, for instance, have much darker pigmentation, and well developed tertiary hair; wavy hair is met with and their general outward appearance differs from that typical of the Indians of North America or Patagonia. Another distinguishing feature of the Indians of Brazil and Bolivia is a smaller head and face (and their bony structure) than those of the North Americans or Patagonians. These differences give rise to the idea that they may have taken shape during the long period in which some groups lived in different natural conditions from others—the tropic and the temperate zones. This idea is supported by the fact that the Patagonians, who lived in natural conditions similar to those in which the North American Indians lived, have acquired similar features to the latter.

The division of the Mongoloid great race into groups under the influence of natural conditions recalls a similar division of the Europeoid great race; a number of types underwent depigmentation after migration to the north and a lengthy stay in a cold, damp climate. Another analogy may be drawn from the Negroid-Australoid great race, the majority of which have very dark pigmentation while some have much lighter colour (for instance, the Bushmen of the southern temperate zone).

RACES AND RACISM

1. THE ESSENCE OF RACISM

The races of man, having developed from a single stock—primitive man—are, from a strictly scientific point of view, biologically similar subspecies divisions. As far as their evolution is concerned, none of the races stands higher or lower than the others in its level of physical development. It is precisely the oneness of their origin that accounts for the races being basically identical, not only in the specifically human peculiarities of their physical structure, but even in many tiny details. When compared with this overall similarity, the few racial differences that exist are of less than secondary importance from the standpoint of biology or in the anatomic-physiological sense and in many cases serve merely to identify members of the same, or a related, tribe.

There are, however, scholars who regard racial peculiarities as being those of a species or even of a genus, who allot those peculiarities an exaggerated taxonomic significance and try to show that there are profound differences between the races. In the opinion of these scholars, the races descended from different ancestors; this is the polygenetic theory of the origin of man. By ignoring facts they strive to show that the races of man are groups of people that differ very greatly in their morphological, physiological and psychological features, that they are not in any way related and are inimical to each other. When the supporters of such ideas admit the common origin of man they maintain that there are “rapidly developing, higher” races and “backward, lower” races. The former are progressive and it is their vocation to rule over the latter who are doomed to subordination, slavery and extinction. The *raison d'être* of racism is the substantiation and defence of the false idea of the biological inequality of the races of man.

The racists usually consider the "white" race to be the higher and the "coloured" ("black" and "yellow") races to be the lower. Some scientists, especially in Germany, Britain and the U.S.A., support the "Aryan" theory, according to which some one group of the North European race is declared to be the "higher race".*

The racists maintain that the few "higher" races have created all culture and civilisation, employing the slave labour of the "lower" races. The "higher" races, they say, are "active" and play a leading role in history, while the "lower" races, being "inactive" play a subordinate role. The majority of racists are of the opinion that the development of society does not affect racial peculiarities, but, on the contrary, the biological, innate qualities of a race determine the progress or retrogression of human social groups. In this way the false idea of the physical and psychological inequality of races becomes the racial theory of the historical development of mankind.

The racists not only sanction this unsubstantiated biological explanation of history, they also regard as identical such categories as race and nation, although the former is a purely biological category and the latter belongs to sociological science. It is a serious error to confuse the concepts of race and nation.

Anthropologists provide us with numerous facts that are definite evidence against the concept that culture is created only by some "higher" race. The racists, it will be remembered, make the level of cultural development dependent upon the greater size of the brain. One of the most convincing refutations of this concept is the development of a high level of culture among the ancient Egyptians. According to the data of the German anthropologist E. Schmidt, the volume of the Egyptian male cranium was 1,394 c.c. and that of the female cranium 1,257 c.c. From this it follows that the brain of the Egyptian was smaller (i.e., less than the average) than that of neighbouring peoples who were at a lower cultural level. Anthropological data also prove that there is no connection between the shape of the head and the level of culture (Fig. 60).

The Germanic peoples present a good example showing that culture is independent of race. Their ancestors were barbarians at the time the Roman state reached its highest level. Later, when the Germanic peoples found themselves in conditions more favourable to development, they

* There have been (occasionally they still make their appearance) theories of the Mongoloid or Negroid race as the "higher" race.



Fig. 60. Norwegians with long (*left*) and round heads

reached a high cultural level while retaining their racial peculiarities. Culture, therefore, has nothing to do with racial features but is determined by social and economic factors. In the course of man's development from savagery to barbarism and later, racial features were of no significance.

Why do the racists insist on their false views? The answer is a simple one. The theory of "higher" and "lower" races, of the right of one race to dominate over another, justifies war between nations—it is the ideological mask concealing imperialist politics.

The racists equate the class struggle in human society with the struggle going on in the animal kingdom; they make use of the reactionary theory of social-Darwinism that developed in the latter half of the nineteenth century. This theory states that modern human society is governed by biological laws that are the same as those that operate in the animal kingdom—the brute struggle for existence, the survival of the fittest, the extinction of the unfit. The racists, like the social-Darwinists, maintain that the division of human society into classes is the result of biological inequality and is due to natural selection. In this way racism attempts to use the laws of nature to explain social inequality in capitalist society.

The racists developed the theory of social-Darwinism and maintained that people belonging to a certain class possess certain racial features.

The advocates of this theory assert that rich people belong, in the majority of cases, to the dolichocephalic type while the poor are mesocephalous or brachycephalous. One has only to examine the facts to see that this assertion is without any basis. In an investigation of recruits called up for service in the Swedish army it was established that both among the well-to-do (bourgeois) and among the poorer classes (workers and peasants) the cephalic index was the same, i.e., 77.0. The same investigation showed that the average height of the better-off recruits was 173.1 centimetres and that of the poorer, 171.9 centimetres. The difference in the length of the body, however, has nothing to do with race and is explained by the better food habitually consumed by the former group. These facts are sufficient to show that the concepts race and class must not be confused. In studying the history of the development of human society the really existing class struggle must not be replaced by an invented “race struggle”.

From the above it may be seen that it is typical of racism to confuse the biological category of race with other categories of a social character, such as nation and class. The unprincipled way in which racism identifies race with nation or class depending on whether it is necessary to justify war between nations or exploitation within one nation, shows clearly that racism is unscientific and reactionary.³⁶

The racists, fulfilling the social demands of the ruling class of exploiters, distort the truth to such an extent that they even attribute a racial character to languages and regard human mentality as the outcome of the racial spirit.

2. RACE AND LANGUAGE

The similarity of the languages of the European peoples, the Slavs among them, has frequently led to the idea that they might be related. Many linguists have made an ardent search for the “common ancestor” from whose language the similar European languages developed. At one time it was thought that scholars had found this “first language” in Sanskrit, the language of the ancient Indian manuscripts. It is true that a number of Indian languages and the Persian language show some resemblance to the European languages which gave rise to the name of “Indo-European” for the whole group of languages.

It is believed that in the distant past India and Iran were invaded by tribes from some other part of the world, tribes that spoke Indo-European

languages, who conquered those countries. The conquerors declared themselves a "higher" race than the local population whom they had enslaved; they gave themselves the name of "Aryan" from the Sanskrit word "arya" meaning noble-born.

The Indo-European languages that have roots similar to the languages of the inhabitants of India and Iran, have also been called "Aryan" by some writers. Later the name "Aryan" was applied to certain racial groups and the findings of the linguists were given an unscientific, racist colouring. Many racists regard only the tall, blue-eyed blonds of modern North Europe as being "true Aryans"—these peoples have been given the name of the "Nordic race".*

If language is the offspring of the race spirit, the peoples speaking Indo-European languages should possess the features of the northern, "Aryan" race. But this is not so. The Kurds, and many other peoples who are Indo-European in language, have skin and hair that is much darker; light-eyed individuals are rare among them. Aryan languages are typical of South Europe where the majority of the people have dark eyes and hair and do not in any way resemble the mythical "Aryans".

The tall, light-eyed and light-haired Finns and Estonians, on the other hand, are close to the North European type in their racial features; the languages of the Finns and Estonians, however, have nothing in common with the Indo-European languages.

Thus the theory of an Indo-European or Aryan "first language" and "common ancestor" with all the features of the "Aryan race" is refuted, and at the same time it is obvious that no race has the right to call itself "Aryan"—noble-born.

Peoples speaking the same language are not racially homogeneous and, as a rule, consist of representatives of a number of anthropological types. Six such types are to be found in Germany, for example.

In Africa the Negroid peoples speak their own languages, in North America they speak English and in South America Spanish, etc. Thus groups of one race that enter into the composition of various peoples and nations, speak different languages.

All this goes to show that language is independent of race and disproves the unscientific theory that language is the offspring of a mysterious "race spirit" in some way "biologically inherent" in a race. Lan-

* *Nordic*—from the German *Nord* (north); from this comes the terms Nordism, Nordist, etc., that the American racists are so fond of using to prove that "hundred-per-cent Yankees" are the "pure-blooded higher race".

guage depends entirely on the development of society, it emerges, lives and dies as peoples develop; it has no causal relation with the race as a biological group.

3. RACE AND MENTALITY

For a long time already races have had clear-cut psychic differences incorrectly attributed to them. Carolus Linnaeus (Karl von Linné—1707-1778), the eminent Swedish naturalist, was one of the first scientists to propose a more or less scientific classification of the races of mankind in accordance with their physical peculiarities; he went wrong, however, in attributing cruelty, melancholy, stubbornness and avarice to the “Asian man”, spite, cunning, laziness and indifference to the “African man”, and mobility, wit and inventiveness (i.e., higher mental qualities) to the “European man”. Thus Linnaeus placed the “white” race in a higher category than the others.

Darwin, on the contrary, recognised the basic similarity of manifestations of higher nervous activity in people of different races. “The Fuegians rank among the lowest barbarians,” he wrote, “but I was continually struck with surprise how closely the three natives on board H. M. S. *Beagle*, who had lived some years in England, and could talk a little English, resembled us in disposition and in most of our mental faculties.”³⁷

Darwin did not by any means explain the low cultural level of the Fuegians as due to mental racial peculiarities. On the contrary, he looked for an explanation in factors of a social nature: “The Fuegians were probably compelled by other conquering hordes to settle in their inhospitable country, and they may have become in consequence somewhat more degraded....”³⁸

When discussing the expression of emotions, of spiritual experiences by means of the face muscles, Darwin came to the conclusion that there is an amazing similarity in this respect among representatives of different races.

In another passage Darwin draws attention to the extraordinary uniformity of shape and methods of manufacturing stone spear- and arrow-heads found in all parts of the world and dating back to the early days of man’s development. He explains this uniformity by the similar inventiveness and mental capacity of the most varied races in even those distant times.

Attempts have been made to substantiate the theory of the mental difference of the races by the fact that the weight of the brain in different groups varies within limits of several hundred grammes. A person's abilities, however, are not to be judged by the weight of his brain. The famous French writer Anatole France, for instance, had a brain that weighed only 1,017 grammes, while the brain of the Russian writer Ivan Turgenev weighed almost twice as much—2,012 grammes. Both writers are deservedly world famous as the authors of works of progressive literature.

Outstanding people come from all races. Many of the statesmen and politicians of Asia and Africa have won world renown—Jawaharlal Nehru, Ahmed Sukarno, Kwame Nkrumah, Modibo Keita are but a few examples.

Special mention must be made of Patrice Lumumba, who gave his life in the struggle for the liberation of the Congolese people. Many representatives of the Negroid race have reached the topmost heights of culture—the scientist Doctor William DuBois, the famous singer and fighter for peace Paul Robeson, the Australian artist Academician Albert Namatjira.

Using special intelligence tests,* reactionary bourgeois scientists try to show that one race is mentally superior to others. These attempts have been made many times, no attention having been paid to differences in the social position of the groups being examined or in the education received by individuals belonging to the groups. Genuine scientists, of course, display a sharply negative attitude to these tests as a means of ascertaining mental abilities.

Some reactionary German anthropologists tried to show in the papers they read at the International Anthropological and Ethnographical Congress in Copenhagen in August 1938 that there exist hereditary mental racial features.³⁹ Their racism was very crude and they even

* The tests consist of questions, and attempts are made to determine the level of mental organisation by the answers given; in this way it is possible to judge only the level of mental development depending on the education received by the subject.

If very difficult questions are presented to persons with high educational qualifications and also to illiterates or poorly educated subjects, a distorted picture of the mental abilities of the latter group is obtained. It is in this way that reactionary scientists "prove" the mental "backwardness" of representatives of the "black" and "yellow" races as compared with the "white" race. [See Y. Y. Roginsky's article in the collection *The Science of Races and Racism* (Transactions of the Institute of Anthropology, Moscow State University), published by the Academy of Sciences of the U.S.S.R., 1938, in Russian].

declared that the Australian aborigines had become almost extinct because of their "poor race psyche" while the Maoris of New Zealand had successfully adopted European culture because, in the opinion of those anthropologists, they belong to the Europeoid race.

There was a sharp protest made at the Congress by more progressive participants. They denied the existence of natural racial features in the human mind and showed that differences in cultural level accounted for the psychic make-up of tribes and peoples. Scientific data also contradict the assertion that there exists a special "racial instinct" that gives rise to enmity between the races of man.

Given favourable social conditions, peoples of any racial composition can create an advanced culture and civilisation. The psyche of individuals, national character and behaviour are conditioned and take shape under the dominant, determining influence of the social environment; racial peculiarities play no role whatsoever in the development of psychic activity.

Nikolai Miklukho-Maklai, a prominent Russian ethnographer and anthropologist, made it the purpose of one of his studies of the peoples of Oceania who were at a low level of cultural development, to ascertain the level of their natural intellect. He spent many years in friendly relations with the Papuans of New Guinea (Fig. 62) and discovered many facts that showed them to possess the same high mental capacities as Europeans. One day, for instance, Miklukho-Maklai was drawing a map of the district in which he lived; a Papuan who had never before in his life seen a map was watching him and immediately noticed an error in drawing of the coastline. The Papuan corrected it very accurately.



Fig. 61. N. N. Miklukho-Maklai
(1846-1888)

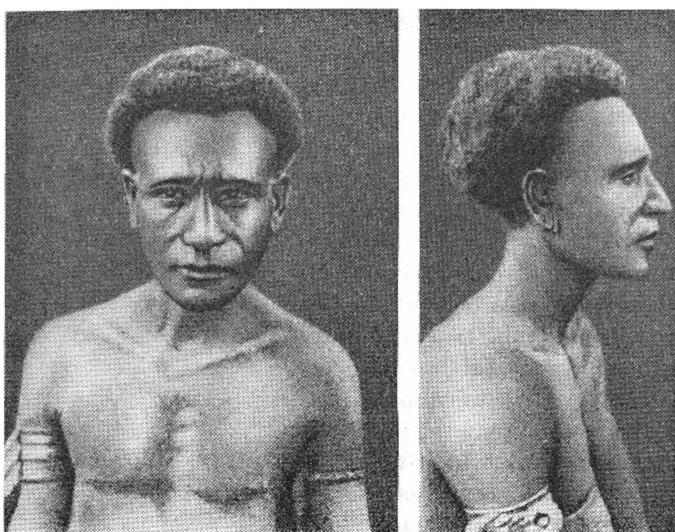


Fig. 62. Papuan from New Guinea
(Melanesian group of Australoid race)

Miklukho-Maklai describes the Papuans as intelligent people with artistic tastes, who make fine figurines of their ancestors and produce a number of artistic ornaments.

Anthropological and ethnographical studies, carried out over a period of many years, enabled Miklukho-Maklai to show in his writings that the Papuans are capable of the fullest cultural development and in this sphere are the equals of Europeans.⁴⁰

His investigations revealed the unscientific and prejudiced nature of the theory of the racists who maintain that the dark-skinned races are incapable of assimilating the spiritual wealth that mankind has accumulated. Miklukho-Maklai devoted the whole of his short life to proving the biological equality of the races of man. He was of the opinion that people of all races are equally capable of the highest achievements in the cultural field.

The principles underlying Miklukho-Maklai's scientific work and his labours for the public good took shape at a time when the revolutionary democratic views of Nikolai Chernyshevsky, one of the greatest Russian thinkers, were in process of formation. Chernyshevsky showed particular interest in questions concerning the races of mankind.⁴¹

Chernyshevsky paid great attention to the details of racial differences and similarities; he rejected the concept of the racists that the races of man are psychologically and physiologically at different stages of development. He also denied the influence of race on historical development and disclosed the reactionary nature of racism.

Chernyshevsky made use of well-founded scientific data in formulating his views of races and racism. He gave high praise to the achievements made in the study of the physiology of the nervous system by Ivan Sechenov. This outstanding scientist wrote the following in refutation of the postulate that the races of man are not mentally equal: "The basic features of man's mental activity and of his sensory capacity remain unchanged in the different epochs of his historical existence and have never depended on race, geographical situation or the level of culture. Only under these conditions can one comprehend the concept of the moral and mental kinship of all peoples in the world, no matter what race they may belong to; only under these circumstances are we able to understand the ideas, feelings and actions of our ancestors in different periods."⁴²

4. EQUALITY OF RACES AND NATIONS IN THE U.S.S.R.

In tsarist Russia there were peoples and tribes who possessed no civil liberties and were kept in a state of extreme economic and national oppression. Uzbeks, Kazakhs, Karelians, Yakuts and other non-Russian peoples were often given appellations that were objectionable to them—the Nenets people, for example, were called Samoyeds, "people who eat themselves, or cannibals". A savage Russification policy was carried out in respect of the non-Russian peoples, and local languages and dialects were persecuted. The ruling classes of Russia spread discord among the nations that formed part of the state in their effort to keep power in their own hands.

The Russian people, who constituted the dominant nation, also suffered from brutal exploitation by the aristocracy, the bourgeoisie, the tsar and the landowners. The aristocrats cultivated the "blue blood" legend and cut themselves off from the masses of the people, from the "lower classes".

The Great October Revolution of 1917 deprived the exploiters of their power. The peoples of Russia were able to promote their social,

economic and cultural development as members of a multi-national state. The peoples of the country began to consolidate their unity in accordance with Lenin's national policy.

Union and autonomous republics, autonomous regions and national areas were formed. Radical social and economic reforms improved the living standards of all the peoples of the country, bringing about considerable changes in their way of life, and national cultures developed rapidly. This development of national culture became very evident even in the first years of Soviet power; everywhere schools were built, illiteracy was wiped out, education was given in the native languages, and national literatures, art and music rose to a higher level; local cadres of scientific workers grew up rapidly. Such peoples as the Tajiks, Mari and others who occupied the "outskirts" of tsarist Russia and had been doomed to gradual extinction, soon overcame their former economic and cultural backwardness.

The consistent implementation of Lenin's national policy led to the historic decision of the First Congress of Soviet Socialist Republics which on December 30, 1922 established the Union of Soviet Socialist Republics.

In this way the prophecy made by Lenin as early as January 1918 came true: "... I am fully convinced that various separate federations of free nations will more and more group themselves around revolutionary Russia. That federation will grow on absolutely voluntary lines, without lies and iron, and it will be invincible."⁴³

The growth of the various republics, regions and territories has shown the capacity possessed by all the peoples of the U.S.S.R. to develop their statehood, economy and culture. New socialist nations have been formed from the old bourgeois nations. The equality of all nations and races is recorded in Soviet legislation. The Soviet Constitution states that:

"The equality of all citizens of the U.S.S.R., irrespective of their nationality or race, in all fields of economic, state, cultural and socio-political life is an immutable law.

"Any limitation of rights whatsoever, directly or indirectly, or, on the contrary, the establishment of direct or indirect privileges for citizens, as well as any propaganda of racial or national exclusiveness or hatred and disdain are punishable by law."

The many nationalities of the U.S.S.R., which include various race groups, have all achieved considerable success in their political, economic and cultural development.

One of many examples of the development of national cultures of the peoples of the European part of the U.S.S.R. is to be found among the Udmurts, who were wrongly called Votyaks before the revolution. Before the October Socialist Revolution, Udmurtia was a backward province of tsarist Russia, the population of which was mostly illiterate. Poverty and disease doomed the Udmurt people to extinction. Under Soviet power Udmurtia has become a progressive republic with a big industry and excellent collective farms. The formerly unwritten language of the Udmurts has been provided with an alphabet; the language of the schools is Udmurt, the Russian language being taught parallel. There are 1,500 schools in the Republic and seven-year schooling is compulsory and free. The Republic's literature is developing. Udmurts can read in their native language the immortal works of Marx and Lenin as well as the best works of Russian and world literature. Izhevsk, the capital of the Udmurt Autonomous Soviet Socialist Republic is an important industrial and cultural centre; it has numerous factories, five higher educational establishments, several research institutes, theatres, a philharmonic society and a broadcasting station. Throughout the Republic there are libraries, clubs, cinemas and other cultural and educational establishments. There has grown up a splendid contingent of scientific and medical workers, teachers, engineers, agronomists, cattle-breeders and people engaged in the sciences, arts and letters.

As another example let us take the development of culture among the Koryaks, a people who live in the extreme north-east of the Asian part of the U.S.S.R. and constitute the basic population of the Koryak National Area. The Koryaks are divided into two groups—the nomad, reindeer-breeding groups and the settled Koryaks who engage in fishing, trapping and the hunting of seals and walrus; the latter group also engage in the gathering of berries.

Socialist reconstruction has modernised the ancient branches of Koryak economy and has established new ones. The people have formed co-operatives. The fishermen now use motor boats instead of skin kayaks, and have modern equipment; there are fishing co-operatives and motor-boat stations. The settled Koryaks are successfully developing vegetable growing and dairy farming. Comfortable houses have been built and many of the villages have electricity and radio. The breeding of reindeer has been rationalised and is carried on under veterinary supervision. The reindeer-breeding Koryaks have changed to a settled way of life. The native language has been provided with an alphabet

and books are published in Koryak. The Koryak literary language is based on the dialect of the Chavchuvens, the cattle-breeding Koryaks. Children of school age get a normal education, those whose parents are reindeer breeders are accommodated in boarding schools. There is a ramified network of medical institutions; a large contingent of government workers, teachers, technicians and medical workers with higher educational qualifications has been built up.

Each of the Union Republics has its own Academy of Sciences. Before the October Revolution only a very small number of books was published in languages other than Russian. Today in the U.S.S.R. books are printed in more than 120 languages, of which some 40 had no alphabet before the revolution.

Many representatives of peoples who were formerly deprived of all rights have achieved great successes in art. The inspired writings of such poets as the Kazakh Jambul and the Lezghin (Daghestan) Suleiman Stalsky are well known abroad as well as throughout the Soviet Union.

The building of communism is proceeding on a gigantic scale in the Soviet Union today; it has a sound social and economic basis and follows the twenty-year plan for the creation of the material and technical basis of communism contained in the Programme of the Communist Party of the Soviet Union adopted at the Twenty-Second Party Congress in October 1961.

By 1980 the material and technical basis of communism will have been built in the U.S.S.R. and this will ensure an abundance of material and spiritual benefits for the entire population; Soviet society will by that time be ready to implement the great principle of distribution according to needs and there will be a gradual transition to a single form of common property. Thus communism will, in the main, have been built in the U.S.S.R.

The full-scale development of communist construction marks a new stage in the development of national relations in the U.S.S.R., a stage in which there will be further progress and nations will draw still closer together.

The racist theories disseminated by the imperialists, are intended to sow discord and enmity among peoples. The misanthropic ideology of imperialism will be defeated by the socialist ideology that is spreading more and more throughout the world and which proclaims the equality of all races and nations, a component part of the profoundly humane policy of peaceful coexistence pursued by the Soviet Union and other peace-loving countries.



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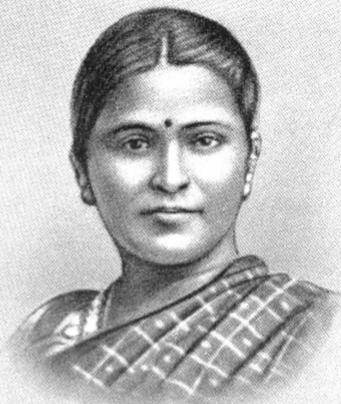
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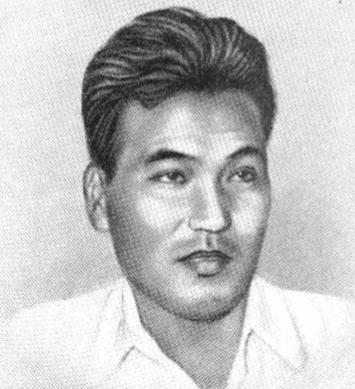
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13 & 14. Indian man and woman of Hindustan (Indo-Mediterranean or South Euro-peoid race).

15. Tamil from Ceylon (South Indian or Dravidian contact group of the Australoid race).

16. Burmese woman from Indo-China (South Asian group of Pacific or South Mongoloid race).

17 & 18. Japanese man and woman (South Asian group of Continental or North Mongoloid race with an admixture of the South Asian and Kuril groups).

19 & 20. Eskimo man and woman from the Behring Sea, Alaska (Arctic group of the North Mongoloid race).

21 & 22. Indian man and woman from Central America (Central American group of the American Mongoloid race).

23 & 24. Patagonian man and woman from Tierra del Fuego (Patagonian group of the American Mongoloid race).

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